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# PAPER TRADE JOURNAL

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY

Vol. LXXX. No. 3 NEW YORK AND CHICAGO, JANUARY 15, 1925 { Per annum, $4.00 / Per Copy, 10 cents

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# PAPER TRADE JOURNAL

ESTABLISHED 1872

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY AND THE PIONEER PUBLICATION IN ITS FIELD

FIFTY-THIRD YEAR

Published Every Thursday by the

LOCKWOOD TRADE JOURNAL CO., INC.

LESLIE R. PALME' PRESIDENT — GEO. S. MACDONALD VICE-PRESIDENT & TREAS — F. K. HOPPIE SECRETARY

10 EAST 39TH ST. N.Y. U. S. A


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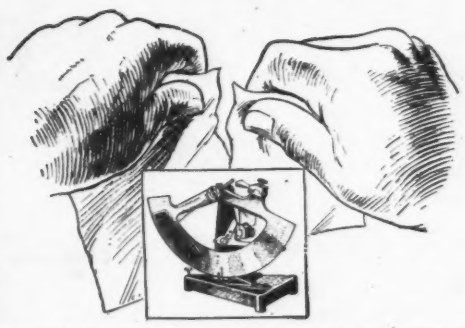

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# PAPER TRADE JOURNAL

Vol. LXXX. No. 3 NEW YORK AND CHICAGO Thursday, January 15, 1925

## KALAMAZOO PAPER CO. TO EXPAND

### Will Expend Approximately $1,000,000 During the Next Twelve Months, Increasing the Daily Capacity of the Concern to Over 200 Tons and Making It One of the Largest Book Mills in the Country—Will Install a 168 Inch Rice, Barton & Fales Fourdrinier Machine With a Daily Capacity of 50 Tons of the Better Grades of Paper—This Will Be Largest Paper Machine in the Kalamazoo District

[FROM OUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., January 12, 1925.—The Kalamazoo Paper Company during the next twelve months will expend approximately $1,000,000 in a campaign that will increase the daily capacity of this enormous concern to over 200 tons and making it one of the largest mills in America devoted to manufacture of book papers, writings and various other high grades of paper.

**Buys New Fourdrinier**

The initial step in the proposed expansion was taken Thursday afternoon when President F. M. Hodge signed the contract for the purchase of a 168 inch Rice, Barton & Fales Fourdrinier machine, with a daily capacity of 50 tons of the better grades of paper. When installed this machine will be the largest in the Kalamazoo river valley district, having an aggregate width of four inches greater than any machine now in use in this district.

Installation of the machine will be in the Riverview division. When originally erected the machine room in that mill was built to accommodate two machines. The first installation made was a 146 inch Pusey & Jones Fourdrinier. That has been in successful operation for several years. The contemplated addition will give the Kalamazoo Paper Company six paper machines in all.

**To Buy Additional Equipment**

Mr. Hodge reports that the purchase of the latest unit will carry with it a large increase in the beater and washer capacity, a large addition to the boiler and power plants, with the installation of several large boilers and an immense turbine unit, also addition to the present storage capacity. None of the auxiliary equipment has been purchased, but orders are to be placed immediately. Plans are also under way for the new buildings required for the general enlargement.

### Bermingham-Prosser Co. Increases Stock

[FROM OUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., January 12, 1925.—The Bermingham-Prosser Company has increased its authorized capital from $500,000 common stock to $1,000,000 common and $300,000 six per cent cumulative, convertible sinking fund preferred stock. Announcement is also made that $250,000 of the latter issue is to be sold at once.

Louis P. Simon, secretary of the company, states that the capital increase is being made to take care of the concern's steady growth and that the steady expansion of business should take care of the entire issue in a comparatively short time.

The Bermingham-Prosser Company, organized November 1, 1915, with a capital of $30,000 and at which time it acquired the Southern Michigan Paper Company, has enjoyed unusual growth and prosperity. It handles a general line of the better grades of paper and twine, purchasing a large percentage of its stock from mills in the Kalamazoo valley district. The company is located in its own plant at the intersection of East Frank street and the Chicago, Kalamozoo and Saginaw railroad. This is a model fireproof structure. The concern also owns sufficient land on which it can erect an addition, doubling its present capacity.

In addition to the sales warehouse in Kalamazoo, this concern also owns and operates the Fort Dearborn Paper Company of Chicago, organized in 1921 and devoted to the sale of coated and uncoated paper seconds and job lots. According to a statement prepared by Lawrence, Scudder & Co., accountants, as of November 30, 1924, the total assets of the two concerns are placed at $979,-174.59.

The present officers of the concern are: President, Arthur T. Bermingham; vice president, Walter P. Bermingham; treasurer, Henry G. Prosser; secretary and resident manager, Louis P. Simon.

### Box Board Men to Meet in Washington

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., January 12, 1925.—A conference is to be held here on next Thursday between box board manufacturers and Secretary of Labor Davis. Some months ago when the industry discussed shorter hours of work with the Secretary it was agreed that the Sunday work should be abolished at once and that the eight hour day should go into effect January 1. It was also agreed that a conference be called here in January and Thursday's conference is the result of that agreement. It is expectd here that there will be a large representation of box board manufacturers to attend the meeting.

On the same day the monthly meeting of the Box Board Association will be held.

### Predicts Good Business

[FROM OUR REGULAR CORRESPONDENT.]

SPRINGFIELD, Mass., January 13, 1925.—In an interview, W. O. Day, president of the United States Envelope Company, says that the paper business is on the upgrade. The outlook for 1925 was declared to be very favorable.

"The paper industry is likely to lag slightly behind other industries," explained Mr. Day, "but although I look for no boom I think that good business is just around the corner. The orders now being received point to prosperity.

# MONTREAL HEARS ANOTHER ADVOCATE OF EXPORT TAX

## Sir Herbert Holt, President of Royal Bank of Canada, Comes Out in Opposition to Embargo But Favors Tax—International Wood Pulp and Paper Co. Adds $30,000 to Amount of Damages Sought—British Columbia's Lumber Exports Heavy in 1924—Canada's News Print Production Capacity Going Up—A. E. Cadman Speaks with Optimism of Future for Pulp and Paper Industry.

[FROM OUR REGULAR CORRESPONDENT.]

MONTREAL, Que., January 12, 1925.—Sir Herbert Holt, President of the Royal Bank of Canada, and one of the foremost industrialists in the Dominion, has come out this week in opposition to an embargo on pulpwood, but in favor of an export tax. Speaking at the annual meeting of the Royal Bank he said:—

"During the twelve months ending October last, we exported to the United States 1,318,735 cords of pulpwood, valued at over thirteen and one-half million dollars. Our forest resources are large, but they are by no means inexhaustible, and we must not forget that they are steadily being reduced by very large exports of lumber and pulp and paper. Today, when this country urgently requires every dollar of earning power it can possibly secure, I think we are foolish to export large amounts of pulpwood in its raw state. Our policy should be changed. While an embargo on exports is perhaps too drastic a measure to advocate, I believe an Export Tax on pulpwood would be beneficial, as an adequate tax would result in the further development of the paper-making industry in Canada and the provision of more work for our people. To avoid too sudden a disturbance in business, the full amount of the tax need not be applied in the first year of its operation, thus giving an opportunity for all concerned to adjust themselves to the new situation and to create a market in Canada for the pulpwood which has heretofore been sold abroad. In addition to making better use of our forest resources, we should endeavor to check depletion by the best methods of fire protection and reforestation which can be discovered."

### Paper Firm Asks $840,000 Damages

An additional $30,000 was added to the claim of the International Wood Pulp and Paper Company, Limited, against the New Brunswick Electric Power Commission at the enquiry before Mr. Justice Leblanc, at St. John, N. B., making the total claim $840,000 now. According to the statement of claim filed by Hon. Dr. William Pugsley, K. C., senior counsel for the company, this amount is made up as follows: $600,000 for land taken; ten per cent for forcible taking, $60,000; and damage by severance, $180,000; total $840,000. At the preliminary session last December, $150,000 was asked for severance damage in an oral statement by Dr. Pugsley but in the written statement today $30,000 was added to this part of the claim. G. C. Murdoch, civil engineer, valued the company's claims at $781,000. Mr. Murdoch testified that he placed the valuation at $59,003.56 made up as follows: 8,364.94 acres at $2.50 per acre, $20,912.33; ten per cent for forcible taking $2,091.23; standing timber, 200,000 superficial feet at $5 per thousand, $1,000; damage by severance through flooding of roads and isolation of property, $35.000; grand total, $59,003.56.

### Heavy Lumber Exports of British Columbia

British Columbia in 1924 shipped 410,000,000 feet of lumber to foreign markets. These figures would have been quite a lot higher had not ice on the Fraser river interfered with the moving of several scowloads of ties which were being lightered to this port. While it is known there has also been a marked increase in the overland business, the exact figures are not yet available. Shingles on the contrary have been considerably less than last year, by 760,000 bundles, by water, but this deficiency has been more than made up by an improvement in the rail trade. Due to the earthquake in Japan, that market proved an active one for B. C. exporters, whose shipments were chiefly for use in the reconstruction program. For the entire year more than 200,000,000 feet have been taken by China and Japan. American markets consumed 100,000,000 feet in 1924 most of which went to the Atlantic seaboard via the inter-coastal route and the Panama Canal. California was also a buyer and the United Kingdom took about 31,000,000 feet exclusive of the bookings for December which were interfered with by ice conditions, as stated, on the Lower Fraser. This, however, is only of a temporary nature and with a little raising of the temperature, the trouble will be eliminated. In the early months of the year New Zealand and Australia took about 20,000,000 feet and this was boosted to 27,000,000 later in the year. India and the Fiji Islands placed orders for 3,000,000 feet each.

### Increase in Canada's News Production

According to George Carruthers, President of the Canadian Pulp and Paper Association, the total daily capacity of Canadian news print mills now stands at 4,850 tons, representing an annual productive capacity of 1,455,000 tons. Early in the present year, he says, new machines will bring the total capacity to around 1,500,000 tons per annum. He adds: "The present annual capacity of the news print mills in the United States is about the same figure, but in view of further development on the various mills in Canada, it is extremely probable that the production of our mills during the course of the present year will exceed that of the mills of the United States."

While the United States is taking 87 per cent of the total production in Canada, Mr. Carruthers mentions with satisfaction that shipments of Canadian news print were made to England during the past year and that there is hope that the market in that country will be developed. He believes also that the trade treaty with Australia which now waits the ratification of the Canadian Parliament will also be of benefit to the mills here inasmuch as Canada will be placed on an equal footing with Great Britain in respect to the importations of news print. At present he says Canada's greatest overseas customers for news print are New Zealand and South Africa.

### A. E. Cadman Optimistic

A. E. Cadman, statistician of the Pulp and Paper Association of Canada, says that there is no reason other than to be optimistic as regards the prospects of the pulp and paper industry in the present year. He adds: "A firm belief in the future shows itself in the new construction already under way and the plans made for further expansion. Present indications point to a revival of business activity, and with the Presidential election out of the way in the United States, one source of uncertainty has been removed. The dull period experienced in Canada has been of benefit in forcing a closer margin of profit and an effort to reduce cost of production, all of which will be of value in the months to come. The various reorganizations that have taken place during the year have added strength to the industry and the pulp and paper industry looks forward with confidence to the coming year."

### More About Spanish-Abitibi Merger

There has been great activity in the securities of the Spanish River and Abitibi Power and Paper Companies, on the Montreal Stock Exchange, consequent on the rumor that merger negotiations between the companies have reached a stage where an early announcement to the shareholders may be anticipated.

According to the gossip both companies will be taken over by a new concern which will offer Spanish an exchange of 2¼ new for one existing preferred share and two new common for one old. The offering to Abitibi will, it is stated, be 1¼ new for one old.

# ADVANCES ON FINE PAPERS ARE REPORTED IN CHICAGO

**Several Mills Issue New Price Lists Showing Advances of From Two to Three Cents on Rag Bonds and Ledgers—Coarse Paper Prices Continue Unchanged But There Are Said to Be Evidences of Advances—Sales of All Varieties of Paper Said to Be More Satisfactory Than They Were at the Same Time Last Year—Tenth Annual Conference of the Chicago Paper Co.**

[FROM OUR REGULAR CORRESPONDENT.]

CHICAGO, January 12, 1925.—Following their wires of December 31, withdrawing all quotations on rag bonds and ledgers, a number of mills have issued new lists making advances of from two to three cents on those items. It is understood that there are some mills in this division which have not indicated any advances along this line as yet. There are those who still insist that advances at this time are unwise in spite of the obvious fact that rags, and in some cases labor, are higher. It is no secret that the net results of last year's operations for a number, perhaps the majority, of mills will be written in red and who can blame their officials for wishing to have a different story to tell their stockholders in reference to 1925.

In the coarse division no changes of note are in evidence but persons who have their ears to the ground say that advances are on the way. Inquiries for items in coarse are abundant and tonnage is good. The recent cut in paper bags does not seem to have been the result of any laws of production but, according to some, rather has the earmarks of business strategy.

The month of January is still young but most sales managers report, with sincerity, that sales are more satisfactory than they were at the start of last year. They all, however, have the disappointments of the old year indelibly written on their minds and are stalking business with the utmost caution.

### Chicago Paper Co. Holds Sales Conference

The tenth annual sales conference of the 100 per cent club of the Chicago Paper Company, 801 So. Wells street, was held Friday and Saturday, January 9 and 10. These annuals are elaborate and serious affairs and never fail to impress the men with the fact that they have a 100 per cent house behind them and that honest effort toward 100 per cent performance on their part is the order of the day.

Friday night was spent in putting away a dinner fit for a king or a traffic cop and getting an eye full of "The Passing Show" at the Apollo Theatre. The boys were given until 1:00 p. m. Saturday to recover from the "night before" and then the serious business of the conference began. The various addresses were not concluded until well on toward six o'clock.

There are a number of contests arranged for the men during the year, the two most prized being the Warren Camp School and the Foldwell Mill Trip. The former is an annual event—the two men who have the greatest sales of Warren Lines—March 3 to April 30—are rewarded with a trip to Cumberland Mills. The winners in 1924 were: Jimmie Northcott and Ed. Bishop. The Foldwell Trip is given each year to the men who have sold their Foldwell quota. Light reading on the way up—a dinner and things at Gull Lake; through the mill the next morning, dinner and golf at the country club and pleasant word puzzles returning. This year the successful men from the Chicago Paper Company were Edward Bishop, Charles Wright, Harry Fick, Jim Northcott, Joe Rowley, Ernest Melchert, Otto Bock, Lloyd Middleton, Fred Foster, Chas. Krause, Wm. Nuess together with representatives from the Century Paper Company, of Indianapolis, Chope-Stevens Company, of Detroit and Commerce Paper Company of Toledo.

The Chicago Paper Company boys have a Creed and Standards of practice that are worthy of adoption by any contact man in the paper industry.

### W. A. Tucker Has a New Title

The broadest smile in Chicago last week was worn by W. A. (Bill) Tucker, of the Parker, Thomas Paper Company, 520 South Canal street. Good cigars were also being passed by the aforesaid gentleman. All in honor of the arrival, in the Madison, Wis., home of Mr. Tucker's daughter, Mrs. R. L. Blodgett, of Elizabeth Jean. The happy event occurred January sixth and the tiny Miss makes the popular William a grand daddy for the first time.

### Middle States Wrapping Paper Men to Meet

The Middle States Wrapping Paper Association will hold its regular quarterly meeting in Chicago, Tuesday, January 27. A number of Illinois Wrapping Paper Merchants have been invited to attend with a view of having them join the association. An important subject up for discussion is the advisability of increasing the diameter of counter rolls from 9 to 10½ inches. A large cutter manufacturer has made up a sample cutter to take the proposed new size and will demonstrate it at the meeting. A large attendance is expected.

### Iowa Wrapping Paper Men Will Get Together

A meeting of Iowa Wrapping Paper Merchants, doing business in that state, is scheduled for January 15 at Cedar Rapids, C. K. Higgins, secretary National Paper Trade Association has been invited to address the group.

### Personal News of the Trade

Bob Butterworth spent a couple of days in Omaha last week. Some People Have All the Luck.

George S. Johnston, sales manager for the Western Paper Company, Omaha, is on an extended business and pleasure trip to California.

Forest Hopkins, vice-president of The Paper Mills Co., 517 So. Wells St., is on a business trip to New York City.

H. W. Suter, assistant sales manager for Champion Coated Paper Company, was a business visitor in St. Louis last week.

D. S. Peck, president, Hanchett Paper Company, 866 Larabee street, sails for an extended European trip on January 20.

I. S. Reynolds, well-known in Kraft paper circles in New York, has accepted a position with Nekoosa Edwards Paper Company, St. Louis.

## Paper Mill Sludge Boom to Farmers

MILWAUKEE, Wis., January 12, 1925.—W. E. Rogan, Marathon county Agricultural agent in a report says:—

"One hard-headed philosopher once said: 'If you keep pounding on an idea enough times you will obtain favorable reaction.'

"That is exactly the experience of the county agent system in driving home the value of lime for Marathon county soil. The development of the lime sludge at the plant of the Wausau Sulphate Fibre company and the very favorable offer of the company to give this material away free has resulted in the farmers using 12,750 tons of this material during the year. In addition to this a number of cars were shipped away from the Wausau Paper Mills at Brokaw. Farmers living within hauling distance of this plant trucked numberless loads to their farms.

"One hundred-fifty-six cars of lime were shipped through the office and 5,000 tons were hauled away from the company's plant. Basing the price of lime shipped in from southern loading points in ground form at $3.00 per ton F. O. B. Marathon county stations, and the price of lime sludge at an average of $1.00 per ton laid down (cost of loading and freight) the amount of saving on 7,020 tons after deducting water content of average of 15 per cent is $12,134. Five thousand tons were hauled away from plants which represented a saving of $3.00 per ton or $12,750, or a grand total of $24,884.00."

# PAPER TRADE IN TORONTO IS OFF TO GOOD START

## Inventories Show That 1924 on the Whole Was a Better Year Than Was Expected—Trade So Far This Month Has Been Good and Is Expected to Improve as Time Goes Along—Abitibi Power & Paper Co. Establishes New News Print Record—Prices for Pulpwood Lower This Year Than Last—Great Lakes Paper Co. Increases Capital Stock From $8,000,000 to $12,000,000.

[FROM OUR REGULAR CORRESPONDENT.]

TORONTO, Ont., January 12, 1925.—The annual statements of leading paper jobbing houses have been prepared and are ready for presentation and it is said that they will show that 1924 was a better year on the whole than many expected. There are no new features in the market situation except that trade is very good so far this month and is expected to improve as the weeks roll around. The demand for kraft paper has shown considerable life of late and a better business is being done. Toilet and tissue mills are pretty busy and report the outlook as improving. Book and writing plants are operating at about the same capacity as they were before the holiday season.

There is a shortage in several lines of paper stock and board mills are in the market for heavy tonnages. Prices on all lines show a tendency to stiffen. Collections have been slow owing to adverse weather conditions and the rather low prices that have prevailed for some time. Quotations in all lines of paper remain firm and it is not thought there will be any changes for a long while. With no disturbing factors on the horizon, both manufacturers and jobbers are looking for a good spring trade.

### Good Record at Abitibi Plant

The last week of the old year established a new record in newsprint production at the Abitibi Company's plant at Iroquois Falls, Ont., where many records were broken in previous weeks during the year. In the matter of safety, there were no fatal accidents at the plant in 1924 and only two permanent disability cases. In 1923 there were four fatal accidents and the improvement is welcomed by management and men. The Abitibi Company is out to win the Safety shield, offered by the Ontario Pulp and Paper Makers' Safety Association during 1925. In 1921, this shield was captured by the Dryden Paper Company, in 1922, by the Provincial Paper Mills, and in 1923, by the Riordon Co's plant at Hawkesbury.

### Pulpwood Prices Are Lower

The prices being paid for pulpwood this year are lower than last and contractors have to figure closely and watch expenditures with a careful eye. Most of the wood cut this winter for the use of the mills at the head of the Great Lakes and for export is being taken out by contractors and individual farmers. About five thousand men are employed in the bush in the Thunder Bay district this winter.

### Sault Mill Wins Safety Shield

The Sault Ste Marie plant of the Spanish River Pulp and Paper Mills has won the championship for the best record in the matter of Safety and will hold the shield in Class "A" mills for the coming year. The trophy is offered for annual competition by the Ontario Pulp and Paper Makers' Safety Association, of which A. P. Costigane, of Toronto, is engineer and secretary. The capture of the award means that the Sault mill lost the smallest amount of time due to accidents per full time worker of any in the province. There has been no fatal accident at the plant since 1921.

### Some Changes on Howard Smith Staff

George Davidson, who for some years has been in charge of sales at the Toronto office of the Howard Smith Paper Mills, has been transferred to an important executive position in Montreal and will remove to that city. He will be much missed by his many friends in the trade. Ernest Rolph has become connected with the organization and has joined the service staff at Toronto. Word received from Howard Smith, president of the company, who is now in Switzerland, is to the effect that his health is greatly improved and he is beginning to feel his old self again.

### Paper Box Staff Held Reunion

The Rudd Paper Box Company were hosts to the staff of the organization at a luncheon held recently at the King Edward hotel, Toronto, to which representatives of the candy and biscuit trades were invited. George E. de Clercq, of New York, gave an address on the Robert Gain biscuit caddy, for which the Rudd Company now has the manufacturing rights for Canada while Paper Sales, Limited, will handle the selling end of the business.

### Good Weather for Pulpwood Harvesting

From the Port Arthur-Fort William district of Ontario comes word that the cold weather is aiding greatly in the work of getting out pulpwood and rapid loading operations are going on. Charles W. Cox, of Port Arthur, has a large camp across Lake Nipigon where he is cutting much pulpwood. The frost has penetrated the ground making hauling favorable and a fair cut of pulpwood will be taken out although not as large as last season.

### New Company Gets Charter

The Canoe Lake Lumber Company, Limited, with head office at Canoe Lake in the district of Temiskaming has been granted a charter, with an authorized capital of $500,000. A. E. Clark, of Toronto, is president and general manager of the organization and W. Norman Fox, Toronto, is secretary-treasurer. The company is empowered to carry on a general lumber and logging business as well as to make and deal in pulp, paper, pulpwood and other allied lines.

### Paper Company Increases Capital Stock

The capital stock of the Great Lakes Paper Company, Fort William, has been increased by supplementary letters patent from $8,000,000 to $12,000,000. It is understood that the company will go ahead in the spring with the erection of a newsprint mill of one hundred tons capacity as a beginning and that the output will be increased later. The company, of which J. H. Black, of Toronto, is president, has been operating a ground wood pulp plant of about one hundred and sixty tons capacity for some months and is finding a steady market for its output.

### Notes and Jottings of the Industry

Ed Buscombe, of the Capital Paper Stock Company, Ottawa, was in Toronto recently on a visit and has removed his family to Ottawa to reside.

The staff of E. Pullan, rag and paper stock dealer, Toronto, presented Miss Bryan, a member of the organization for the past eight years, with an address and suitable present on the occasion of her leaving to take up her residence in Los Angeles, Cal.

Word has been received in Toronto of the death of E. J. Darby, at Ottawa, in his 86th year. For nearly a quarter of a century he was Crown Timber Agent for the Ontario government and was superannuated in 1921.

At the last meeting of the Toronto Carton Club, Mr. Collett of Collett-Sproule, Limited, paper box manufacturers, Toronto, exhibited some fine papeterie boxes of which he is the inventor.

Harry P. Reid, former superintendent of Kilgour Brothers' plant, manufacturers of bags and paper boxes, is now on the selling staff. His health which was poor for some time is much better since he assumed an outside position.

The staff of Warwick Brothers & Rutter, manufacturing stationers, Toronto, were recently entertained at the home of G. R. Warwick, 178 St. George street, president of the company, and a very pleasant time was spent.

# *Why does the back-tender smile nowadays?*

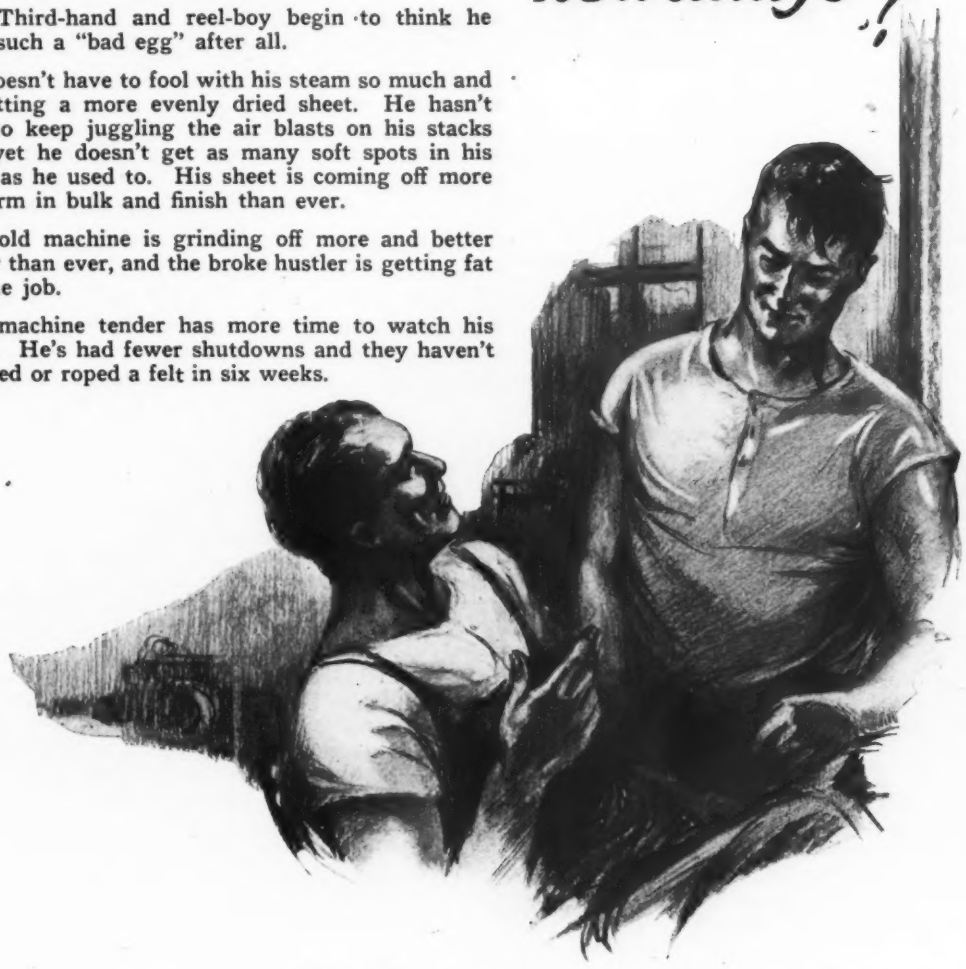
Has some new joy come into his life? Has he been set-up to run Number 2 machine?

The Third-hand and reel-boy begin to think he isn't such a "bad egg" after all.

He doesn't have to fool with his steam so much and is getting a more evenly dried sheet. He hasn't had to keep juggling the air blasts on his stacks and yet he doesn't get as many soft spots in his reels as he used to. His sheet is coming off more uniform in bulk and finish than ever.

The old machine is grinding off more and better paper than ever, and the broke hustler is getting fat on the job.

The machine tender has more time to watch his stuff. He's had fewer shutdowns and they haven't washed or roped a felt in six weeks.



What's the big idea anyway? Come over here while I whisper in your ear—

"THEY'VE PUT ON ONE OF THOSE VICKERY FELT CONDITIONERS!"

Why don't you write and get the inside facts from the

BIRD MACHINERY

**BIRD MACHINE COMPANY**
SOUTH WALPOLE ~ MASSACHUSETTS

Western Representative
T. H. Savery, Jr.
1524 Republic Bldg., Chicago, Ill.

Canadian Builders of Bird Machinery
Canadian Ingersoll-Rand Co., Limited
260 St. James Street, Montreal, Canada

7600

# PHILADELPHIA TRADE READY FOR MORE ACTIVE BUSINESS

**Fine Paper Division Already Showing Greater Activity While Coarse Papers Exhibit Some Improvement—Large Gathering Present to Enjoy Program Arranged for Graphic Arts Night—Wholesale Waste Merchants Association to Hold Banquet at Hotel Majestic on February 12—Paper House of Pennsylvania to Expand Export and Import Department.**

[FROM OUR REGULAR CORRESPONDENT.]

PHILADELPHIA, Pa., January 12, 1925.—Early days of 1925 were far brighter than those that began the 1924 cycle and, with the inventory season almost completed, it is expected that further improvement will be made. The advance business of the first week was very satisfactory.

The Fine Paper Division of the trade has been slightly more active. The printers are now in the market for all grades of writings such as bonds, ledgers and book papers and the stationery trade also has been placing orders to take care of the opening of new accounts for the coming year in the way of loose leaf devices, blank books and other bookkeeping requirements. Prices have been fairly well maintained for all the grades.

### Coarse Papers Moving Better

Like the fine paper division the coarse paper section has been experiencing a decided improvement in the present orders and in a larger volume of inquiries that give evidence of broadening demand. Krafts and other wrappings are in more frequent demand. Many of the large dealers, who have been summarizing the December month accounts, find that they are farther ahead in their sales than they anticipated and that the season was a fairly good one in consideration of the previous months of dullness. Mill salesmen are now making the rounds in larger numbers and in most cases the offerings of Krafts have been slightly advanced.

Both the rag and paper stocks are dwindled down in the warehouses and although there is not much demand for the paper grades the rags are moving in large volumes.

### Graphic Arts Banquet

PAPER TRADE representatives dominated in number and influence all those of the associated crafts in the great graphic arts family at its banquet on Graphic Arts Night, Thursday evening of last week, in the Manufacturers' Club, and at a function given under the joint auspices of the Paper Trade Association of Philadelphia and of the Typothetæ of Philadelphia.

Present at the gathering were exactly 440 paper distributors, printers, engravers, electrotypers, printing and paper supply dealers, advertising agents and larger buyers of paper and printing, from Philadelphia, the leading cities and towns throughout Pennsylvania and adjoining States, the Metropolis and other large cities. They listened to two terse addresses from men who came from Toronto to deliver a message nonetheless constructive and helpful because it came from without the States. Indeed both A. L. Lewis of the Southam Press, Toronto, and equally well known as Chairman of the Marketing Committee of the U. T. A. and his co-worker, W. H. Griffin, brought points of view and opened up avenues of opportunities for the paper men as well as for the printers on which both believe they can capitalize. Furthermore as spokesman for the paper trade Morgan H. Thomas, Vice-President of the Garrett-Buchanan Company, as President of the Philadelphia Paper Trade Association, bespoke the friendly feelings of the trade to their printer friends and Peter Sherman of the Beck Engraving Company, with colored crayon drew pictures and caricatures of members and guests on a large blackboard. In his address President Thomas stressed the brightest future that was in prospect for the trade. Chairman Lewis, on behalf of the printers, outlined the plan created to build up the printing industry for the creation of better markets for all its divisions. Mr. Griffin told of the Mail Order advertising plan which gave him first prize at the recent Direct-By-Mail Advertising Men's Convention held in Pittsburgh, Pa. He summed up the plan as it was carried out by the Maple Milling Company upon his original ideas through the distribution of series of descriptive circulars and the issuance of certificates which entitled the ladies, using its flours and other mill products, to a Mail Course in Home Economics, all the ads being printed and designed by the Southam Press of Toronto, of which he is a partner. President S. Clayton Wicks, of the Typothetæ presided and introduced the speakers. Others who occupied the speakers platform in brief addresses were Vice-President E. E. Eilert of the U. T. A. and President of the Employing Printers' Association of New York; Treasurer Fred Gage of the U. T. A., from Battle Creek, Mich., and Col. Edward T. Miller, National U. T. A. Secretary of Chicago. During the dinner souvenirs of boxed stationery were distributed by the Hammermill Paper Company of Erie, Pa., through its three local distributors, the D. L. Ward Company, Riegel & Co., and the Thomas W. Price Company. The Miller Saw Trimmer Company supplied mementos in the form of 'phone memos, while the Godfrey Roller distributed a colorful array of caps worn during the evening. Ralph G. Luff, Treasurer and head of the Coarse Paper Division of the D. L. Ward Company, led the vocal numbers as Song Leader.

A special table was allotted to the various committees who arranged for the evening's entertainment. Seated there were Norbert S. Considine, Paper House of Pennsylvania; Morgan Thomas, George W. Ward, D. L. Ward Company; Arthur B. Sherrill, Riegel & Company; Harry Donaghue, Molton Company; Richard Hartung, A. Hartung, Inc.; Allen R. Whiting, Whiting Patterson Company; David Lindsay, Jr., Lindsay Brothers; W. W. Wilcox, Wilcox, Walter Furlong Company, and Leon Beck of the Beck Paper Company. On the Entertainment Committee were Howard Sattherwaithe, Garrett-Buchanan Company; Arthur Sherrill, president Thomas, George W. Ward, W. Ward, Ralph G. Luff, and Norbert Considine.

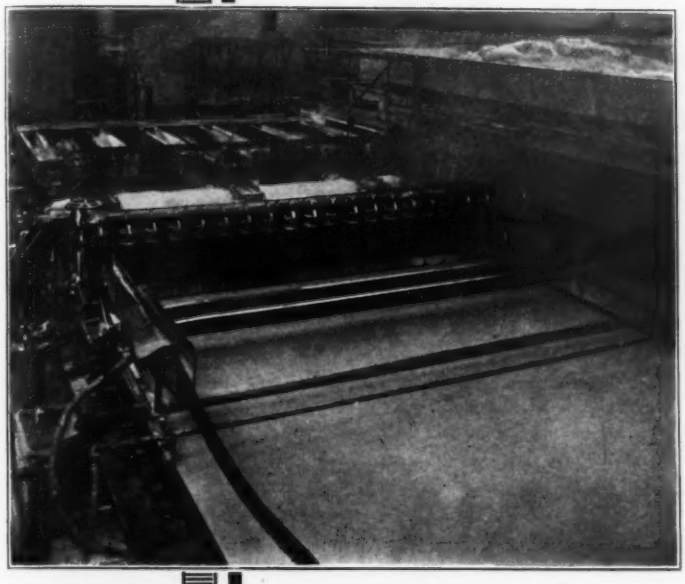
### Waste Paper Dealers to Banquet

Another banquet of interest to the local trade is now being arranged by the Philadelphia Wholesale Waste Merchants' Association. The committee appointed at the December meeting of that recently organized body has decided to hold the banquet at the Hotel Majestic on February 12. This will be the first annual banquet to be held by the organizations of the Philadelphia waste trade. It is expected that more than 300 will attend. The local dealers will extend to the mill men, dealers and distributors in other cities an invitation to be present as the guests of individual firms. Before assembling at the dining table the annual election of officers will be held with the following nominated at the last meeting as the candidates: President, Evan G. Badger; Vice-President, Thomas A. Kenny; Treasurer, William L. Simmons and Secretary, William J. McGarity, Sr. Those who have been nominated to the Executive Committee of the Association are: John Murphy, Samuel Imber, Charles J. McNichol, Edward Orr and Louis Bantiviglio. The committee also has arranged for an entertainment program of vaudeville talent and is shortly to announce a speaker. Those who have charge of the entertainment program are Thomas Kenny, William J. McGarity Sr., and Thomas F. Simmons.

### Expand Exports and Imports

Through the appointment of a manager, J. P. Cooper, to supervise the exporting and importing of its fine paper products, especially its large news print products, the Paper House of Pennsylvania, 28 N. 6th Street, has secured the service of an experienced local representative of the paper trade, who will develop that department. Manager Cooper was formerly in charge of the Import and Ex-

(*Continued on page* 66)



The illustration at the left pictures the wet end of a 200″ Fourdrinier making Rotoplate. It shows the installation of a Voith High Pressure Stock Inlet with which the machine is equipped, and which is making possible a better paper at an increased production.

# Making Better Rotoplate

Today people the country over, are reading with interest the Rotogravure supplements of newspapers.

The two 200″ wide paper machines of the United States' largest producer of Rotogravure paper, are equipped with Voith High Pressure Stock Inlets. Consequently, the paper is now of better formation, more even in caliper and contains no foam spots or lumps.

Fewer breaks are experienced and production has been increased ten per cent.

We have ready for you an interesting booklet telling about the inlet. Write for it today.

## VALLEY IRON WORKS CO.

APPLETON, WIS.

# PAPER RESEARCH OF THE BUREAU OF STANDARDS DURING THE FISCAL YEAR 1923-24[1]

By B. W. Scribner, Chief of Paper Section.

## Introduction

Before considering in detail the researches of the Paper Section, it may be of interest to describe the functions and organization of the Bureau of Standards as a whole. The paper industry is no doubt well acquainted with the work of the Bureau as regards specific problems related to paper. It is believed, however, that a clearer understanding of the many ways in which the Bureau is cooperating in solving industrial problems of general application may be helpful.

## Functions and Organization of the Bureau of Standards

Functions—

The Bureau is charged with the development, construction, custody, and maintenance of reference and working standards and their intercomparison, improvement, and application in science, engineering, industry, and commerce.

Classes of Standards—

Standards are divided into five classes as follows:—(1) Standards of measurement (measurement of length, mass, time, heat, electricity, etc.); (2) standard constants (the fixed relations between physical quantities which underlie scientific research and industrial processes, such as the mechanical equivalent of heat, velocity of light, ratio of electrical units, and the constant of gravitation); (3) standards of quality (specifications for material); (4) standards of performance (specification of operative efficiency of machines and devices); (5) standards of practice (codes for technical regulation of construction, installation, and operation of machines and devices, and for increasing the efficiency and safety of industrial processes).

Organization—

The work of the Bureau is necessarily of an extremely varied character, and for purposes of organization it has been found convenient to group together experts in similar lines of work irrespective of the class of standards dealt with. The Bureau is, therefore, made up of 11 scientific and technical divisions, besides those concerned with the administration of the central office, the operation of the Bureau's plant and construction work. Each of these divisions is under the direction of a division chief, and the work is further subdivided into sections, each section dealing with a particular class of problems.

Tests and Investigations—

The Bureau has served for many years as a testing and research laboratory for practically every branch in the National Government service. A considerable amount of such work has been done also for State Governments.

In the case of individuals or firms, certain investigations are undertaken where the results would seem to be of benefit to the public, the Bureau reserving the right to use the data thus found as it sees fit. Some routine testing is likewise conducted for private individuals or manufacturers where no commercial laboratory is fitted to perform the work, or where a dispute has arisen, all parties to the controversy having decided to refer the matter to the Bureau of Standards as a referee. In the case of test work performed for private parties, nominal fees are charged, which are turned into the Treasury. With the exception above noted, nearly all the investigational work is carried out in cooperation with other Government departments or with industrial, technical and scientific organizations, and very largely at the request of those for whom the investigations are made.

Research Associates—

In line with this policy of closer cooperation a system of research associates has been worked out, and several of the most important industries are maintaining such associates at the Bureau for carrying out particular investigations in which they are interested. In nearly every case these research associates are supported not by a single manufacturer but by a group through their trade association; and the results, which are published by the Bureau, are available to the public at large. In this way the facilities of the Bureau's laboratories and the experience of its scientific staff are made of benefit to the maximum number of people throughout the country, and incidentally men are trained for the industries in research methods. There are at present stationed at the Bureau 44 associates, representing 24 industries.

## Functions and Organization of the Paper Section

The work of the Paper Section consists of research and the testing of paper to determine its quality.

The paper testing is confined largely to samples submitted by the various Government departments to find if deliveries conform to the Government specifications. Tests are also made for the public where the nature of the test desired complies with the regulations of the Bureau regarding routine testing, as given above. While this work is of a routine nature, the data secured assists in the development of specifications and in standardization of testing methods.

The research work has two main divisions. One is occupied with the standardization of paper. This involves study and development of paper testing methods for determining the properties of paper. The testing of paper is still in a state of development and accurate classification of paper products and complete specifications of properties must necessarily await the standardization of testing methods. The other main division of the research work consists of the study of paper manufacturing, directed chiefly to standardization and simplification of raw materials and processes. This work involves the use of laboratory and semi-commercial papermaking equipment.

In line with the general policy of the Bureau, to insure selection of research work of the most value to the paper industry, the program of work is laid out with the advice of representatives of the industry. An advisory committee from the paper industry is appointed by the American Paper and Pulp Association to cooperate with the Bureau in this respect.

## Research of 1923-1924

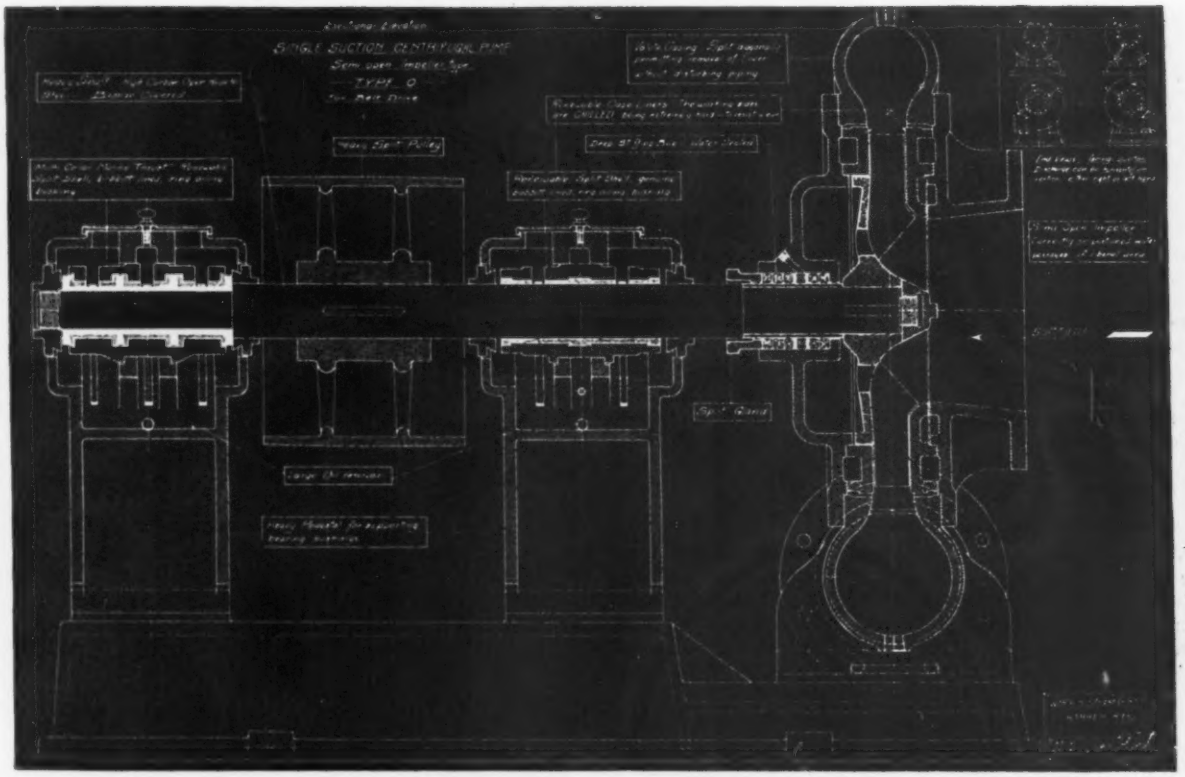
Following is a description of each of the main problems studied during the fiscal year 1923-1924, as given in the Annual Report to the Director, dated June 30, 1924. The means of the investigators conducting the various researches, are included.

Colored Micrographs (Merritt)—

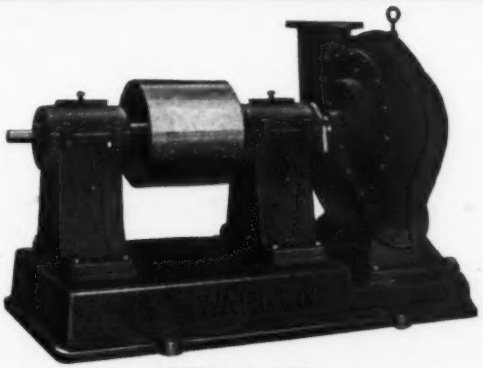
A technologic paper, No. 250, entitled, "Pulp and Paper Fiber Composition Standards," was published April 24, 1924. This includes colored plates of the common papermaking fibers. The different fibers illustrated are shown separately and in mixtures of given proportions, with the colors developed by the stains commonly used in microanalysis reproduced. Such plates are of much assistance to workers in microanalysis as they greatly aid in the identification of fibers both by color and by form. The illustrations of the fibers were drawn by the use of a *camera lucida* apparatus, and the drawings painted with water colors. Formulas for preparing the

[1] Published by permission of the Director of the Bureau of Standards, U. S. Department of Commerce, Washington, D. C.

# The Story of



# THE WARREN STUFF PUMP



EXAMINE this blue print! Study it! It tells the whole story of the Warren Stuff Pump far better than we could tell you in words. It shows why we are able to guarantee such a high efficiency in the handling of stock up to 5 per cent consistency, and why the Warren Stuff Pump will maintain this efficiency for a far longer period of service than the ordinary pump. Compare it point for point with the paper mill pumps you are now using.

Paper mill engineers tell us that it's the perfect pump for paper mill service.

## Warren

## *Steam Pump Company—Warren, Mass.*

Boston Philadelphia Chicago WARREN St. Paul New York San Francisco

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stains used are given and the water colors used to match the colors, developed by the stains are described.

PRESERVATION OF STANDARD FIBER SAMPLES (MERRITT)—

An investigation was made of the manner of preserving standard fiber samples used for reference in estimating the fiber composition of paper. Samples that had been kept for several years both in the dry state and in water were tested with the stains commonly used, to find if the correct color reactions were obtained. The results showed that samples may be kept indefinitely in the dry state but that if kept in water they should be renewed at least every two years.

FIBER COMPOSITION NEWS PRINT (LOFTON, MERRITT)—

In connection with the standardization of methods of micro-analysis, a study of the estimation of the fiber composition of news print paper is being made. Such paper presents unusual difficulties as the two kinds of fibers present differ widely, not only in size but also in weight. The ordinary methods of estimation depend upon comparison of volumes only, therefore are of doubtful accuracy in this case. In order to find the degree of accuracy of the methods in general use, standard samples of known fiber composition have been submitted to various laboratories for their analysis. Methods of eliminating the errors due to difference in weight and size of the fibers are being investigated. It is planned to extend this study to mixtures of the other common papermaking fibers.

DIMENSIONS OF FIBERS (MERRITT)—

While there is considerable information available concerning the the dimensions of fibers, little attempt has been made to collect this information in convenient form for reference. A search of the literature is being made and the information obtained in this manner, together with that from original sources, compiled. Both paper and textile fibers are included. Fiber dimensions are of considerable importance, not only for purposes of identification but in view of the fact that the strength of materials made from fibers depends to a large extent upon the length and diameter of the fibers.

RELATION OF FINISH OF PAPER TO BRIGHTNESS (LOFTON)—

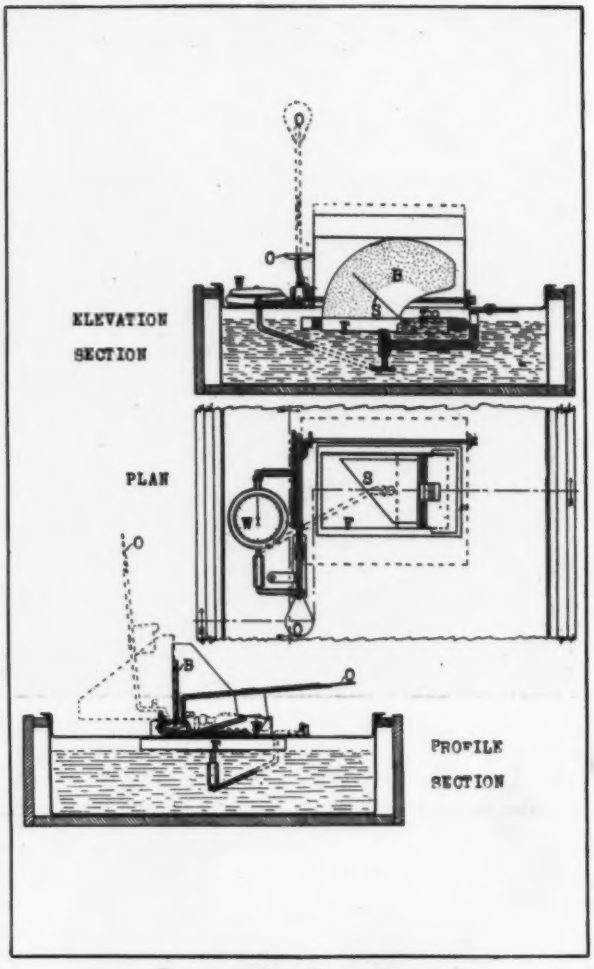
As a continuation of the work on color of paper, study was made of the effect of the "finish" of the paper upon the brightness. It was thought that possibly the varying gloss of paper under different conditions of finish might influence the brightness value obtained with the colorimeter. The results already obtained indicate that the finish does not influence the brightness. It is felt, however, that more accurate means of measuring these properties must be developed.

ANALYSIS OF THE STRENGTH OF PAPER (CARSON)—

A report previously published, entitled, "The Effect of Atmospheric Humidity in the Physical Testing of Paper," gave data showing to what extent the strength of paper as determined by various testing instruments is affected by changes in atmospheric humidity. A discussion of the apparent anomalies in the test results obtained in this work was prepared. Attention is called to the fact that while the better grades of papermaking fibers are as strong as steel, only a small proportion of this strength is utilized in paper. The strength of paper is attributed to the net effect of two independent factors, the strength and flexibility of fibers and the mutual adherence of fibers. Both of these factors are affected by changes in moisture content caused by variations in atmospheric humidity. The resulting effects upon the different strength tests are discussed in detail.

SIZING QUALITY OF PAPER (CARSON)—

Certain papers are treated with rosin to render them more or less water resistant, this process being known as rosin sizing. A previous publication described a new method of testing the degree of sizing, this method depending upon the characteristic curling of paper when placed on the surface of water. The work on this problem during the past year has been mainly in the direction of developing an instrument for applying the test. An instrument has been completed, of which the outstanding features are reproducibility of result, ease and rapidity of testing, and elimination very largely of the personal equation. The apparatus is illustrated by the




DETAIL OF CURL SIZING TESTER.

section shown in the figure. The entire mechanism is controlled by an operating lever, O, shown in two positions. When this lever is in the upper position the float, F, is lifted clear of the water in the reservoir. A test specimen, S, is secured to the float by a spring clip. On bringing the control lever forward to its lowest position the specially designed float is lowered onto the water and a portion of the test specimen is wetted, as a result of which the paper curls. Simultaneously the stop watch, W, is automatically started. The unwetted portion of the specimen serves as a pointer and moves across the field of vision against the reference background, B. When the test specimen has progressively curled as far as it will in one direction and at the instant it begins to uncurl, the operating lever is depressed and the stop watch thereby stopped. The time interval thus obtained is that required for water to penetrate half through the sheet and serves as a comparative value of degree of sizing. On lifting the operating lever to its upper position again the stop watch is set to zero and the float is lifted clear of the

Dilts

# ANSWER TO CROSS WORD PUZZLE

*Published in Jan. 8th issue of Paper Trade Journal*

1 D 2 I 3 L 4 T 5 S 6 F 7 A 8 R 9 P 10 A 11 P 12 E 13 R
14 S T A N D 15 E G O 16 K R A F T
17 A T T 18 A T T
E 19 I T 20 L O E
21 M 22 A S T S 23 N 24 M E N 25 D 26 S
27 A N T 28 S P E E 29 D 30 T O P
31 C N E W A 32 P I
33 H A T 34 B E A T E R S 35 W E N
I 36 C 37 K E Y E D 38 S D
39 N A 40 B O 41 B 42 P 43 S T A 44 L 45 L L
46 E W E R S 47 R E 48 D 49 V E N U E
50 L T D 51 P A 52 E 53 A 54 A N G
55 S 56 T S 57 S P 58 A N S 59 M E 60 H
A E 61 U 62 I T S 63 I A I
64 W O R K S 65 D E E 66 D I L T S

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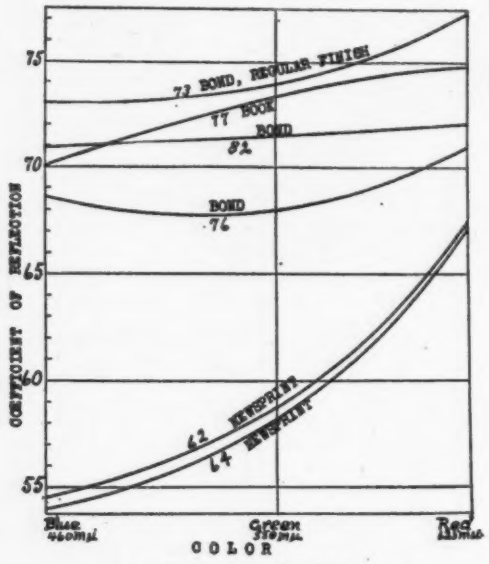
water, carrying the test specimen with it. The specimen is replaced by a fresh one and all is in readiness for another test. A more detailed description of this instrument with a discussion of some results obtained with it, will be published shortly.

COLOR CHARACTERISTICS OF WHITE PAPERS (LOFTON)—

It s commonly known that all so-called white papers show variation in tints. In order to find the extent of the departure from true white, 21 commercial papers, including news print, book, writing, bond and ledger, were tested. It was found that all the papers tested were quite deficient in blue light reflected and, to a smaller extent, in green.

For this work, a Pfund colorimeter was used. This apparatus makes use of more than three reflections from the material being tested and was found to be much more sensitive to small color differences than the ordinary colorimeter which makes use of only one reflection.

In the following figure are shown graphically the color characteristics of six papers tested for color by this method. The brightness




*—Color curves of various papers.*

values lie along the vertical axis of the figure and the colors for which the brightness values of the papers were determined lie on the horizontal axis. Each coordinate on the graphs is the relative brightness of quality of light of the given color reflected by the given sample.

It should be noted that Bond 82 is characterized by a graph which is nearly horizontal, since the brightness values for each of the three colors is nearly the same. This indicates that this paper reflects all colors of light in nearly the same ratio, having no predominate tint. In addition, its high position on the vertical scale shows that it is near a true white.

The curves characteristic of the two news prints are decidedly off the horizontal position, and show that these papers reflect much more red than blue light. These graphs are also much lower on the vertical scale than the other graphs, indicating that these samples are gray in color rather than nearly white, since they reflect much less light of any color than do the other papers. The report of this work was published as Technologic Paper No. 244, November 17, 1923.

DETECTION OF ANIMAL SIZE IN SURFACE SIZED PAPERS (CARSON)—

Many high grade papers are given a surface coating of gelatine or starch to improve the writing quality and other physical properties. As gelatine is considered superior to starch for this purpose, it is necessary that a positive test be available for determining which material was used. The two materials may give a similar reaction when the usual tannic acid test for gelatine is used Two methods are recommended: (a) Hydrolizing any starches that may be present before adding tannic acid; (b) adding ammonium molybdate in very slightly acid solution to a water extract of the paper. The latter and more simple method is preferred.

EFFECT OF WEIGHT OF GAGE NEEDLE ON BURSTING STRENGTH TEST (LOFTON, COSTELLO)—

This work was done as a part of the standardization of the bursting strength test. This test is made by clamping the paper over an orifice against a rubber diaphragm, and appying hydraulic pressure until the paper breaks. The breaking point is registerd on a pressure gage. It was thought possible that variations in the weight of the gage needle might influence the test results. Needles of three widely differing weights were used in testing different lots of paper of varying kind and weight. The results obtained with the different needles were in close agreement, showing conclusively that the weight of the needle does not affect the test.

COMPARISON OF TENSILE TESTERS (LOFTON, COSTELLO)—

In order to find the comparative results obtained with idfferent tensile strength testers, tests were made with four different types in common use. Twelve different lots of paper were tested, these being representative of a wide range of products. Two of the machines gave superior results as regards variation between tests of separate speciments of the same sample. Average results obtained by testing ten speciments of a sample gave close agreement when duplicated on the same machine. There was wide variation, however, between average results obtained with the different machines. A report of this work is being prepared and should be available for publication shortly.

TEST FOR WATER RESISTANCE (CARSON)—

In connection with development of specifications for papers made waterproof with asphaltum, additional work has been completed regarding the test for water resistance. A modification of this method was evolved, however, which gives good results. It consists in folding the paper box-shape, filling with water and placing on the surface of a piece of ground glass. Any moisture penetrating the paper appears on the surface of the ground glass and makes it transparent. Some waterproofed papers which showed transudation of water in a few minutes by this method, remained standing indefinitely under a water column without showing evidence of water penetration. A report of this work is being prepared for publication.

CONTROL OF BEATING (SHAW, BICKING)—

The beating of paper stock is the most important part of the papermaking operation, yet its control is still largely a matter of personal judgment. This condition results in considerable variation in the properties of the paper produced. Various instruments have been devised for control of the beating operation and a study is being made of the use of these instruments with the experimental papermaking equipment to find how uniformly the various properties of paper can be maintained.

SIZES OF PAPER—

A complete report of the Committee on Simplification of Paper Sizes which collaborated with the Bureau in the work on standardization of paper, was published by the committee in September, 1923. Mr. F. W. Hume, secretary, the National Publishing Co., 15 West 37th Street, New York, N. Y., had charge of the distribution. This is a review of the entire work on standardization. The results of an extensive survey of existing conditions as regards paper sizes are given and recommendations made in regard to adoption

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*Shipment from closed ports for this season is practically concluded. Are your needs fully covered?*

*We have the facilities and resources for supplying your regular requirements throughout the year and to take care of you in an emergency.*

*To confer with us will cost you nothing but may save you money whether you use BLEACHED or UNBLEACHED SULPHITE, KRAFT or GROUND WOOD, WET or DRY.*

## M. GOTTESMAN & COMPANY

—INCORPORATED—

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**New York, N. Y.**
**U. S. A.**

European Offices:
Stureplan 13,
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of standard sizes. The following stock sizes were recommended for adoption by the paper industry:

General Printing and Publishing:
26 by 29 inches—29 by 52
25 by 38 inches—38 by 50
32 by 34 inches—44 by 64
35 by 45½ inches

Book Publishers:
30½ by 41 inches—41 by 61

Forms and Letterheads (bonds, lgdeers and writing paper):
17 by 22 inches—22 by 34
17 by 28 inches—28 by 34
19 by 24 inches—24 by 38

Data are included regarding classification and definitions of paper and technical specifications.

CLASSIFICATION AND DEFINITIONS OF PAPER—

As a part of the work on standardization of paper, definitions of over 800 terms commonly applied to paper products and paper manufacturing processes were compiled by the committee on classification and definitions. These were published in PAPER TRADE JOURNAL, January 17 to March 6, 1924.

COMPARISON OF FOREIGN AND DOMESTIC CLAYS (SHAW, BICKING)—

The purpose of this investigation was to find the relative merits of American and foreign clays used as paper fillers. Eight representative clays were used. Papermaking tests were made in the experimental paper mill and a portion of this work duplicated in a commercial paper mill.

The comparative study included the amount of clay retained in the paper, the quality of the paper produced and those physical properties of clay such as color, grit, plasticity, etc., that might affect the paper manufacturing process or the finished product. The results show that the amount of clay retained in the paper and that the quality of the paper in general are the same for both the American and foreign clays. The color and grit tests slightly favor the foreign clays but not sufficiently to justify the consideration of only these properties in selecting clays.

The results of the commercial mill test agree with those of the duplicative work in the experimental mill. They also include additional data on white water losses and the value of a saveall for recovery of materials.

A technologic paper containing the report of this work is in press.

SEED FLAX STRAW AS PAPERMAKING MATERIAL (KELLOGG, SHAW, BICKING)—

Owing to the immense quantities of seed flax straw available, most of which is at present wasted, this material has attracted considerable attention as a source of papermaking fiber. An investigation of its use for this purpose was made, using both the whole straw and the tow. The material was pulped by the sulphate process. Pulping tests made in the experimental mill were repeated in a commercial mill to obtain reliable cost data. The pulp obtained from both sources was made into paper on the experimental paper machine.

The results indicate that there would be no difficulty in producing papers equal in quality to those obtained from wood. The following cost data show, however, that at the present time both the initial cost and the cost of conversion of flax straw would be greater than that of wood.

Flax straw at the present time sells for around $9 per ton f.o.b. shipping point in the flax growing regions. It requires about 6 tons of straw to produce 1 ton of pulp suitable for wrapping paper. Allowing $5 per ton for freight on the straw, this would represent an initial cost of $84 for straw for 1 ton of pulp. As 2½ cords of wood at $12 per cord produce 1 ton of pulp at a cost of $30, there is a difference of $54.00 per ton in favor of wood. It is roughly estimated that the cost of handling the straw in the mill (cutting and dusting) would about equal the cost of shipping and barking the pulp wood. The chaff from the straw, however, has some value as a stock food or can be used for fuel.

The chemical consumption per pound of pulp produced is about double for straw that it is for wood. The time required for cooking flax straw is somewhat less than for wood.

It requires approximately 2½ tons of tow selling at from $80 to $120 a ton to make 1 ton of pulp suitable for bleached writing paper. The chemical consumption is about the same as for wood. The bleached paper made from seed flax fiber does not have the superior qualities of a sheet made from linen rags, and, therefore, cannot be compared with it. It is more comparable to bleached sulphite pulp, with which there is no possibility of its competing in cost. The complete details of this investigation were published in PAPER TRADE JOURNAL, August 2, 1923.

CARUA FIBER FOR PAPERMAKING (SHAW, BICKING)—

While wood will probably continue to be the chief source of papermaking fibers, there are possibilities of development of new sources of fibers, especially for paper requiring some unusual characteristic. Carua fiber, which is produced in Brazil, has been considered as a possible substitute for rope stock and an investigation is being made of its suitability for this purpose. The supply of rope stock is steadily diminishing and there is considerable interest in finding other sources of fibers having similar properties.

USE OF GLUE IN COATING PAPER (GOTTSCHALK)—

Casein is commonly used as the adhesive in applying mineral coatings to paper but owing to the probable increase in price and the uncertainty of future supply of this material, there is considerable interest in finding a substitute. A study of the use of glue is being made, a fellowship having been established for this purpose by the National Association of Glue Manufacturers. Most of the work during the past year has been in regard to perfecting the mechanical operation and developing the necessary degree of water resistance. Printing tests of clay coated papers in which glue was used as compared with others in which casein was used showed no difference in printing quality and no modification of the printing process was necessary. Further work will be done as regards waterproofing and studies will be made of the use of different grades of glue and different coating minerals.

ANTITARNISH PAPERS (KIRKWOOD, SCRIBNER)—

Mention of this investigation was made in the previous annual report. It was undertaken with the cooperation of the electrochemistry section of the bureau. Specimens of commercial antitarnish paper, together with specimens of ordinary papers not especially made for this purpose, were wrapped around strips of silver and the paper covered strips allowed to stand in jars in which the air had been thoroughly purified. At the end of 13 months, the metal strips were examined as regards the tarnishing effect produced. The report of the electrochemistry section on this test shows that papers especially made for wrapping metal goods have a comparatively slight tarnishing effect in general while those not made for this purpose have a decided tarnishing effect.

In respect to comparative tarnishing effects of different kinds of antitarnish papers, the results indicate that certain kinds of these papers have greater tarnishing effect in general than other kinds. It is felt, however, that these results are not sufficiently conclusive to definitely classify the different papers as regards antitarnish value.

Additional tests will be made to confirm these results and to find the causes of the tarnishing effect found, in order to determine more positively the type of paper best suited for metal wrapping purposes.

CASELINING PAPER (SCRIBNER, CARSON)—

In connection with specifications for caselining papers used for oversea shipments, requested by the Transportation Division, Bureau of Foreign and Domestic Commerce, a large number of such papers were tested and tentative specifications prepared. These were published in Trade Information Bulletin, No. 208, Department of

(*Continued on page 68*)

# The New Beloit Drive

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## A Simple, Rugged Drive for Paper Machines that Require no Expert Attendance

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# Editorial

Vol. LXXX New York, January 15, 1925 No. 3
HENRY J. BERGER, Editor

## COMING EVENTS

American Paper and Pulp Association, Convention and Meeting of Affiliated Associations, Waldorf-Astoria, February 2-5.

Technical Association of the Pulp and Paper Industry, Convention, Waldorf-Astoria, February 3-5.

Salesmen's Association of the Paper Industry, Convention, Waldorf-Astoria, February 2-5.

Canadian Pulp and Paper Association, Convention and Meeting of Affiliated Bodies, Ritz Carlton Hotel, Montreal, January 28-30. Technical Section, January 28-29. Woodlands Section, January 29. Annual Dinner, Friday evening, January 30.

## KRAFT DOES NOT DETERIORATE

A controversy has arisen in connection with the deterioration of some Kraft paper that is in the hands of the War Department which is unfortunate to say the least.

It seems that during the war the War Department purchased about 1,000,000 pounds of kraft paper which was not used but was stored near New York City. Some of the government officials got wind of the stored paper and obtained some 250,000 pounds for the use of the Government Printing Office.

It was subsequently suggested that the paper might deteriorate as it was stored in a damp warehouse and it was tested and found that some of the paper had deteriorated. In addition to this some paper manufacturers were asked as to whether or not the paper would deteriorate and they said, in writing, that under the circumstances cited, it probably would.

Insofar as the Government was concerned this was the end of the matter. It has been reported, however, that it has been stated in the trade that after the paper manufacturers in endeavoring to cooperate with the Government had given this opinion, the report in some manner gained circulation that the manufacturers had given out an opinion that kraft paper as a whole deteriorates with age. The Government officials concerned in the matter state that there is no truth in this report and that it was clearly understood that the deterioration of kraft paper was meant only in this particular case in which the paper had been stored for some years in a damp warehouse.

Owing to rumors regarding the deterioration of Kraft paper that appeared to him altogether unfounded, Mr. C. E. Dobson, secretary of the Southern Kraft Manufacturers Association, New Orleans, La., thoroughly investigated the likelihood of Kraft deterioration and received reports from the Bureau of Standards at Washington, D. C. and the Forest Products Laboratory at Madison, Wis., which should definitely settle this question. In view of the importance of the matter these reports, in part, are reprinted herewith.

"This is in reference to your inquiry of October 18, on the 'Permanency of Kraft' says the Bureau of Standards, "which we advised we would answer after obtaining results of tests in progress. These tests have been completed and they confirm our opinion that Kraft paper of good quality is quite durable, being at least as durable as any wood pulp papers.

"Tests were made on 36 samples of representing 23 different lots of papers which had been purchased as Kraft wrappings from various sources during the World War period and held in storage since that time. Definite data concerning the ages of the papers, the kind of papers and original strength are not available. Concerning the ages of the papers, however, it is known that they are all at least five years old and that some lots had been stored possibly three or four years longer than this time. Tests were made of bursting strength with the Mullen tester, and folding strength with the Schopper folding machine.

"Of the 23 lots tested, 15 were as strong as newly made No. 1 Kraft having a bursting strength of nearly a point per pound on a 24 x 36 inches, 500 sheet ream basis and a folding endurance across the machined direction of over 1,000 double folds, four lots showing approximately 80 per cent of this strength. The remaining four lots were the only ones that were very deficient in strength. From microscopical examination of the fibers of the last lots, we found that one paper was composed entirely of sulphite fiber. The other three were composed, apparently, of sulphate fibers but did not appear to have been produced by the regular Kraft sulphate process.

"Tests of Kraft wrapping papers from our files ranging in age from one to three years which were tested when received show that these papers had lost practically no strength in that period of time.

"The statement which you bring to our attention that 'Kraft paper contains practically all the lignous and oxidizing substances which cause the paper to deteriorate,' we believe is open to question. In our opinion, Kraft fiber is quite well purified and we see no reason why it should deteriorate more rapidly than fibers which had been more thoroughly cooked and possibly bleached. While additional cooking and bleaching may take out additional impurities, it is possible this treatment may also weaken the fiber, thus tending to make it less resistant."

"This letter refers," says the Forest Products Laboratory, "to our recent letter on the question of deterioration of Kraft paper in storage. We are enclosing a table showing tests on seven samples of Kraft pulp taken at random from storage. All of these samples were made more than seven years ago and tested at that time.

"The table shows the date when the tests were made, bases weight of the sheet tested and the various strength data described at the head of each column.

"It will be observed that as a general rule the Mullen test and strength factors (which is the Mullen test divided by the basis weight) has increased during storage. The tensile strength of all the samples shows an improvement. This test, by the way, is independent of basis weight. The per cent stretch shown by the paper during the testing for tensile strength is practically the same or in one or two instances shows a slight improvement. The last column in the table shows the relative humidity of the air in the testing room and the slight variations shown do not make a great difference in the value of the tests.

"The results shown in the table confirm the observation in our previous letter that apparently little deterioration had taken place; in many cases the paper may be said to have improved during storage."

After reading the foregoing there should be no doubt in the minds of intelligent persons that Kraft, under reasonably favorable circumstances, can be stored with as little danger of deterioration as any other variety of paper.

## What Is Paper Board?

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., January 14, 1925.—Considerable difference of opinion exists between Appraisers at Boston and New York in connection with the import duty on paper board. In this connection, Assistant Secretary of the Treasury Moss in charge of Customs is sending the following letter to the Appraiser at Boston:

The Department is in receipt of a memorandum from the Director of the Special Agency Service inviting attention to a difference of opinion between your office and the office of the Appraiser of Merchandise at New York in the classification of merchandise described by you as paper board and which would be returned by the Appraiser at New York for duty as paper rather than as paper board at the rate of 30 per cent ad valorem under paragraph 1309 whereas you contend that as the merchandise exceeds 9/1000 of an inch as provided for in paragraph 1302 it is properly dutiable as paper board at 10 per cent ad valorem or at 4 gold marks per 100 kilos countervailing duty under T. D. 39610.

Te Department submitted this question to the Collector of Customs at New York for a report as to the reasons which influenced the Appraiser to reach the conclusion that the merchandise was dutiable as paper rather than as paper board, and the collector in a letter dated the 2nd instant transmits a report from the Appraiser dated the 30th ultimo who reports that the merchandise under consideration is made on the Fourdinier machine and not on a multi-cylinder or board machine, and that a survey in the trade at New York shows that the merchandise is not sold under the commercial designation of tube board but as paper. The collector expresses the opinion that there is no definite line of division in the trade between board and paper, one of the chief characteristics of board being its rigidity or stiffness and the fact that the merchandise under consideration is over 9/1000 of an inch in thickness does not necessarily make it a board and the Appraiser invites attention to the fact that paragraph 1302 does not specify that all paper over 9/1000 of an inch in thickness shall be classed as board but that "Any of the foregoing under 9/1000 of an inch in thickness shall be deemed paper."

In view of the Appraiser's report that the merchandise is not known in the trade at New York as paper board and as the rate for paper under paragraph 1309 is higher than that under paragraph 1302 the Department is of the opinion that the doubt should be resolved in favor of the Government, leaving to the importers if dissatisfied to their remedy by protest.

## News of the Baltimore Trade

BALTIMORE, Md., January 12, 1925.—With Baltimore still digging itself out of the snowstorm of January 2, recorded as one of the worst in the city for several years, paper dealers, jobbers and distributors report only slight difficulty in deliveries or other transportation. Representatives of the various Baltimore paper houses attribute this to efficiency in their transportation service, as well as that furnished by transfer and transportation facilities supplied them from outside their immediate establishments.

The Whitaker Paper Company of Baltimore has just mailed out the first piece of literature in its national direct mail advertising campaign for 1925. The attractive four-page double folder is printed on White Mountain Enamel Paper, and for convenience in ordering, for sample sheets or for dummies a card is enclosed for ordinary or special requirements. The folder also is being mailed out from the offices of the Whitaker Paper Company at Pittsburgh, Atlanta, New York, Chicago, Cincinnati and Detroit.

H. E. Ramsen, manager of the fine paper department of the Whitaker Paper Company of Baltimore, has returned from a business trip to Philadelphia.

Richard Ashby, who has represented the Whitaker Paper Company of Baltimore in that city for several years, is now representing his company in Washington, D. C.

The annual sales meetings of all the salesmen of the Whitaker Paper Company of Baltimore were held January 2 and 3 in the offices of the company in Baltimore. Among the speakers were representatives of the Union Bag and Paper Corporation of New York, of which the Whitaker Paper Company of Baltimore is Southern representative.

On the evening of January 2 a social meeting and dinner were held by the salesmen at the Hotel Rennert, Baltimore. Twenty-seven salesmen for the company participated in the meetings.

## New Eagle-A Service House in New York

Marquardt, Blake & Decker, Inc., 419 Lafayette street, New York City, have been appointed a service house for Eagle-A papers, thus becoming the sixth distributor of Eagle-A products in the Metropolitan district.

This appointment is the culmination of the original service house plan to establish a sixth service house in New York City whenever conditions warranted such action.

Marquardt, Blake & Decker, Inc., are a young, popular and progressive organization composed of men of long experience and complete familiarity with the paper trade in the New York territory.

Situated in the largest paper and printing market in the world, Marquardt, Blake & Decker, Inc., have grown and prospered in spite of keen competition, through their aggressive sales policies and efficient service, and have continually augmented their sales and service force to keep step with their expanding business.

The acquisition of this new service house, should be a particularly significant piece of news to the paper trade at just this time when the American Writing Paper Company is still in receivership, as it establishes and confirms the confidence in and good will that is believed to exist for the company, and its present management and policies by the trade generally.

Including the newly appointed Service House, the New York market is now served by the following Eagle-A Service Houses:—Beekman Paper and Card Company, Inc.; Lasher & Lathrop, Inc.; J. E. Linde Paper Company; Marquardt, Blake & Decker, Inc.; Miller & Wright Paper Company; The Whitaker Paper Company.

## Forestry Association Formed

PITTSFIELD, Mass., January 13, 1925.—The offer jointly made by Kelton B. Miller, owner of the Berkshire Eagle, Cortland Field Bishop of Lenox and Z. Marshal Crane of Crane's Paper Mills of Dalton to donate $150 to any town that shall acquire by purchase or otherwise 100 acres of land suitable for a town forest and place it under the town forest act, was made available the past week when the Berkshire Forestry Association was organized with 35 charter members representing the two cities of Pittsfield and North Adams and 20 of the 30 towns of the county.

The aim of the organization is to arouse interest in forests and the acceptance of the offer. If this is done it will mean at least 3200 acres of forest land in the county.

The officers elected were as follows: President, Kelton B. Miller, of Pittsfield; Vice President, James A. Hardman of North Adams; Secretary-Treasurer, Harold S. Osborne of Pittsfield; executive committee, the foregoing, Frank J. Pope of Great Barrington and John M. Goodrich of Lee.

## Kalamazoo Paper Men Visit New York

KALAMAZOO, Mich., January 12, 1925.—Felix Pagenstecher, president of the Bryant Paper Company; A. Allen Fox, secretary-treasurer; W. B. Milham, Glenn S. Allen, Charles Clarage and Vernon T. Barker, directors of the same corporation, have returned from a visit in New York. They were there for a general discussion of the pulp market.

# *A Consultation of Experts*

WHEN the expert dyer finds it expedient to consult with other experts on dyeing, the services of experienced dye men are available at each National Branch Office.

Every five minutes during 1924, National forwarded an answer to some dyeing problem, a total of over 26,000 laboratory reports.

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Section of the

# Technical Association of the Pulp and Paper Industry

AN ORGANIZATION FOR THE ENCOURAGEMENT OF ORIGINAL INVESTIGATION AND RESEARCH WORK IN MILL ENGINEERING AND THE CHEMISTRY OF PAPER, CELLULOSE AND PAPER-MAKING FIBERS GENERALLY; IT AIMS TO PROVIDE MEANS FOR THE INTERCHANGE OF IDEAS AMONG ITS MEMBERS IN ORDER THAT PROCESSES OF MANUFACTURE MAY BE MADE MORE EFFICIENT AND IMPROVED ALONG TECHNICAL LINES.

Conducted by W.G. MacNAUGHTON, Secretary

## SOME STATEMENTS CORRECTED

OCEAN FALLS, B. C., January 7, 1925.

EDITOR, TECHNICAL SECTION:

An article in the PAPER TRADE JOURNAL, of October 30, under the title "Steam Boilers and Steam Power Installations," makes statements which need some corrections.

It says: "The utilization of electric energy for heating is a degradation of energy and is opposed to all the principles of efficiency, as the following calculations will show:

1 e.h.p. hour = 2,544 b.t.u.

Evaporative power of 2,544 B.t.u.=2.6 lb. of water from and at 212°F. at 100 per cent efficiency.

Evaporative power of 1 lb. coal of 12,500 B.t.u. $= \frac{12500 \times 7}{100 \times 970} =$

9 lb. of water from and at 212°F. Thus 1 lb. of coal will evaporate 3.44 times as much water assuming a boiler efficiency of 70 per cent as 1 e.h.p. hour while 1 lb. of coal is capable of producing only 1 e.h.p. when the coal is converted into a gas and then burned in an internal combustion motor of higher over-all efficiency than a steam power plant.

All these calculations are correct so far as they go.

The conversion of coal into electrical energy is therefore only 20.3 per cent efficient because of the tremendous loss, in the medium of combustion in the motor.

It will be evident, that the only proper and correct energy comparison, of the two systems of producing steam, must be based on an energy unit.

The unit of energy is 1 ft.-lb.

The unit of heat is 1 b.t.u. equivalent to 778 ft.-lb.

The unit of electrical energy is 1 watt, per minute equivalent to 44 2384 ft.-lb. = 0.05686 B.t.u.

The unit of power is 1 h.p., equivalent to 33,000 ft.-lb. per minute equivalent also to 1 e.h.p. or 746 watt-minutes.

In speaking however, of boiler horse power, we are dealing with a term of vastly different energy value. I boiler h.p. is the absorption of 555 B.t.u. per minute. Its equivalent energy value is therefore 555 x 778 = 431,790 ft.-lb. per min. That is a boiler-h.p. is 13.08 times that of a mechanical or electrical h.p. The real energy comparison therefore must be based on the following calculation: 1 lb. of coal of 12,500 b.t.u. value has an energy value of 12,500 x 778 = 9,725,000 ft.-lb. and will at 70 per cent boiler efficiency produce only 6,807,500 ft.-lb.

12,500 B.t.u. is equivalent to 219,838 watt-minutes. What will 219,838 watts per minute produce in an electric steam generator?

It will actually produce 97 per cent of its equivalent energy value in the steam produced, that is to say it will evaporate 12.5 lb. water per minute.

10 kilowatt hours will in an electric steam generator produce 1 boiler h.p. hr. = (60 x 431,790) ft.-lb. equivalent values.

10 kw.-hr. = 26,552,000 ft.-lb. per hr.

1 boiler h.p. hr. = 25,907,400 ft.-lb. per hr. that is about 97 per cent efficient.

From these figures, it will be evident that instead of being contrary to all principles of efficiency, the opposite is the truth, and hence it cannot be said that the generation of steam by electricity is "a degradation of power." No coal steam plant has ever reached such a high efficiency.

It is interesting to figure, what the total energy usage would be for a modern paper mill, which had available water energy to meet all requirements.

Such for a 250 ton per day mill would be roughly as follows:

12,000 e.h.p.

10,000 hp. for grinding.

6,000 boiler h.p. for steam, equivalent to 78,480 e.h.p.

The total energy requirements are 3,315,840,000 ft.-lb. per m. = 55,264,000 ft.-lb. per sec.

For a possible 100 ft. average head this will require a flow of 552,640 lb. of water per sec. that is, 8,842 cusecs. With a turbine efficiency of 90 per cent this amount is increased to 9,824 cusecs.

If the average head of 200 ft. is possible than half this amount of water is required. Of the 6,000 boiler hp. necessary, 1,000 can be safely estimated as being procurable from the sawmill refuse.

To produce 5,000 boiler h.p. for 350 days, will require at 70 per cent boiler efficiency, 62,300 long tons of 12,500 B.t.u. coal. An average value of such coal would be $7.50 per ton, delivered at the mill. An annual cost of $467,250. In addition to this is the excess cost of operation of the coal steam plant.

The total cost of operation will be about $0.75 per ton.

Annual cost of operation $46,725.

Annual cost of operation electric steam plant, $11,681.

Total saving, $502,294.

Roughly, this amount would pay 10 per cent on an investment of $5,000,000.

From a business standpoint therefore if water is available, it becomes a mere matter of the consideration, of the extra investment, of the addition of (79,000 e.h.p. equipment less 1/6th.) ÷ 0.97. This can be done for considerably less than $5,000,000.

It has been estimated, that about 3½ million hp. is the total development of hydroelectric power in Canada, and this only represents about 8 per cent of the known possible development.

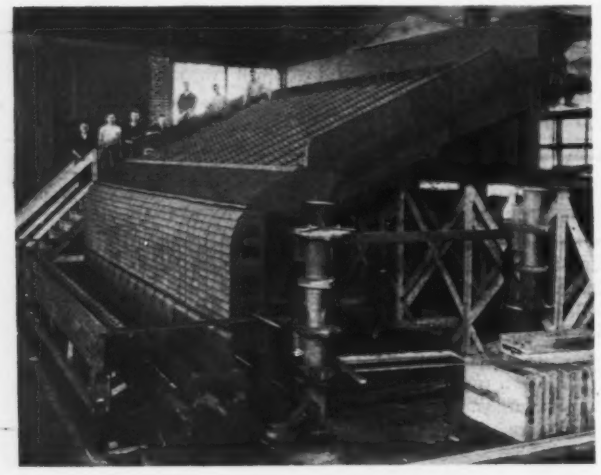
It will be seen then, that with the increasing value of coal, and the shrinkage of the highclass coal fields, the development of hydro-electric energy offers a sound, business proposition for large industries requiring steam. This is especially true in the province of British Columbia. Its large pulp timber areas, interwoven, with its many mountain torrents rushing through the narrow and deep ravines, making dam construction possible at a low cost, its numerous lakes at high altitudes where large storage capacity is available, make it with the development of the electric steam generator a truly wonderful field for the development of the paper industry that would be independent of the supply of coal or any other fuel, the transportation of which must always be a costly problem in such a rugged area.

CHARLES H. LEICESTER, Chief Engineer, Pacific Mills, Ltd.

# REDUCTION OF WASTE IN BOILER PLANTS

Engineers were called upon to save 30,000,000 to 50,000,000 tons of coal a year by raising the efficiency of boiler installations in industrial plants by J. G. Worker, of Philadelphia, in a talk before the Engineers Society of Western Pennsylvania, Steel Works Section, in Pittsburgh on December 18.

Speaking on the subject "How to Obtain Higher Thermal Results in the Boiler Room," Mr. Worker, who is assistant to the president of the American Engineering Company, estimated that 200,000,000 tons of coal a year are burned on the 12,000,000 horsepower of mechanical stokers now in service. He declared that the efficiency of these installations could be raised from 15 to 25 per cent by applying to the older stoker installations the combustion controls, heat recovery devices and improvements in the stokers themselves that have demonstrated their value in the last few years in hundreds of modern boiler plants.



LARGEST MECHANICAL STOKER IN THE WORLD.

Six of these stokers, built by the American Engineering Company, of Philadelphia, are being installed by the Public Service Company of New Jersey, in its central station at Kearny, New Jersey, which will provide electric current for the industrial area surrounding Newark. Stokers embodying the same scientific principles of design as these giant super-stokers are built in smaller sizes for factory power plants, and it is estimated by combustion engineers that their general adoption in place of old-style stokers would save from 30,000,000 to 50,000,000 tons of coal a year.

### Figures Applied to the Paper Industry

Applying these figures to the paper industry, with its annual consumption of approximately 9,000,000 tons of coal, gives a possible saving of 1,350,000 tons to 2,250,000 tons of coal a year.

What such a saving would mean to the paper industry is obvious. Its effect would be equivalent to a general tax reduction, for there is no tax that bears more heavily on industry than that of wasted fuel. This saving also would relieve the railroads of the burden of hauling millions of tons of needless freight, thus enabling them to give better service to industry in general. It would be a long step toward conserving the fuel resources of the country.

Installations of stokers are now being made at the rate of 750,000 horsepower a year, said Mr. Worker. Installations of all other forms of fuel burning apparatus, he pointed out, are negligible in comparison with stokers. Oil burning accounts for not much more than one per cent of the total horsepower installed in the United States and pulverized coal not even one per cent.

Mr. Worker told of the development of the modern mechanical stoker, which in recent tests has shown as high as 92.7 per cent efficiency in the burning of coal under boilers, and pointed out that with the old limitations under which stokers had to be installed, removed and with modern control and heat recovery devices, even higher efficiencies will become possible.

We must begin to discriminate, he said, between combustion processes and heat-recovery elements. Much of the apparent superiority in some of the published results of tests of pulverized coal, he pointed out, is due not to any inherent advantage in this way of burning coal, but rather to the heat recovery devices provided. Too often comparisons are made between the prformance of a pulverized coal installation in which the last word in heat recovery has been incorporated and a stoker installation in which an old-style stoker has been set with solid brick walls and no heat recovery whatever.

### Evolution of the Stoker

Tracing the evolution of the stoker, Mr. Worker said:

"It has been only a few years since most stokers were operated with natural draft, except in the multiple-retort underfeed stoker, where forced draft was used. The original stoker was made in only a few sizes. It was short, without an extension grate, and crudely built. As at that time most of the boiler settings were wide, no attempt was made to change the length of the stoker, but more retorts in width were installed for high capacity."

In the old stokers when high capacity was desired the fuel had to be burned as rapidly as possible—too rapidly for efficient combustion. In the newer stokers the length has been increased so as to give ample time for complete combustion. Mr. Worker showed with lantern slides a comparison of the stoker of a few years ago with those of today. Among the latter are the stokers built by the American Engineering Company for the new Kearny Station of the Public Service Corporation of New Jersey. These stokers, the largest ever built, are 24 ft. 10 in. in overall depth and 27 ft. 9 in. wide. They are able to burn 35 tons of coal per hour apiece.

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## To Survey Thickness of Box Board

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., January 14, 1925.—Frank Records, Secretary of the National Paper Box Association, and H. A. Dickie, Secretary of the Folding Box Manufacturers National Association are making surveys of the thickness of box board used in the manufacture and set up of boxes. In connection with the simplification program which is being worked out by the Industry and the Simplified Practice Division of the Department of Commerce.

It is expected that the survey will be completed about the first of February following which a conference will be called with box distributers and consumers in New York City when the recommendations of the box manufacturers will be submitted. Following this it is anticipated that a general conference will be called on the subject.

# MAINTAINING FURNACES IN THE PAPER MILL

By H. C. Evans, Manager, Alton Boxboard and Paper Co.

Much has been written concerning maintenance economy in paper mill operation, and an untold amount of time and money have been spent in an endeavor to lower this price of production in almost every phase of the paper manufacture except in the boiler room. In view of the fact that the power item comprises from 10 per cent to 40 per cent of the total production cost it is worthy of most careful and painstaking study.

Most mill operators realize this fully, though few have the time to devote to the study and experiment necessary to determine to what extent and by what means this serious loss can be remedied.

The major items of power expense are labor of operation, fuel consumed and cost of furnace maintenance. Most plants of the present day are equipped with stoker and other labor saving devices which reduce the boiler house labor to a very low minimum, so that much further reduction in this direction cannot be expected.

### Improvements in Furnace Design

The introduction of higher settings under boilers and other marked improvements in furnace design have brought about gradual increased fuel efficiency. These improvements while materially reducing the cost of fuel have at the same tim brought the feature of furnace maintenance to more prominence. Years ago the cost of keeping the furnace lining in good condition was a minor factor. The old type furnaces were operated at much lower rating with a consequently lower combustion temperature so that even inferior grades of refractory linings would re mains in serviceable condition for long periods of time. It was quite the general practice under the conditions of cheap fuel during these periods to allow furnace linings to remain in bad repair,—a condition in-

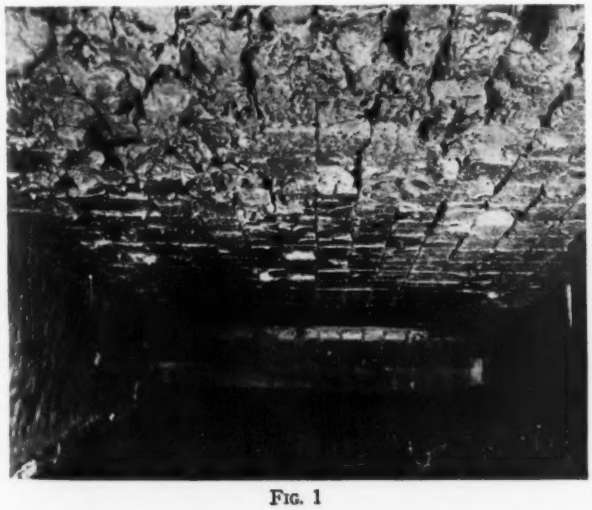

Fig. 1

tolerable with present production methods with high fuel and labor cost. Today even though refractories have been greatly improved in quality the linings do not have the life commonly found in the less efficient furnaces of yesterday.

A good many years ago we had brought our paper plant to the point where we had eliminated every conceivable waste within reason, until we were forced to look to their boiler house for further economies. In the initial part of our investigation, many methods were tried in an endeavor to decrease the cost of our furnace maintenance. At the time of beginning our investigation our boiler house comprised 5-350 horsepower Sterling boilers operated by chain grate stokers. On one of these units we installed undergrate blowers as we had at that time no room for the installation of additional boilers. One noticeable effect on the unit equipped with the forced draft was the rapid decay of our linings. The

Fig. 2

other units while not deteriorating as rapidly were nevertheless found to have so short a life that our maintenance costs were exceedingly high. An investigation of the maintenance costs of other plants brought us the information that our conditions were not unusual. We tried the better refactories in the form of firebrick and found some relief though the maintenance cost was still quite high.

### A Period of Investigation

During this period of investigation we attempted to use several plastic lining preparations on the market consisting of fireclay and brick grog which we purchased with the idea that this material might be better than the use of brick by the elimination of the joints. In this we were sadly disappointed because the materials when refractory enough to withstand the furnace temperatures matured only for a short distance leaving the poorly bonded body back of this matured structure. As soon as this matured structure would wear away to an extent that the granular unbonded zone was exposed the entire wall would fall in. We then went back to the use of well fired high grade brick laid up in the customary manner with fireclay mortar. This was the condition up to December, 1921, when we undertook the use of a new refractory product.

At the outset of the new order, the engineers of the organization supplying the refractories worked with our men in attempting to solve our maintenance problem. How well this program has been solved will be apparent from the photographs which accompany this paper. Using the best grade of firebrick we were able to purchase previous to that time, we secured eight to nine months service from our arches and approximately eighteen months from the side walls of these furnaces. In our No. 1 boiler furnace, an arch was put in service on December 21, 1921. Seven months later the arch and side walls were in condition as shown in Fig. 1.

### Results Secured

We started out with the new refractory on this furnace using it for patching purposes and Fig. 2 shows the conditions after a

period of 60 days operation. From these photographs you will note that the material as applied had developed a great amount of shrinkage and while protecting the arch and filling up the spalls, presented a rather rough appearance. It is to be noticed in this photograph that we did not realize our desires in that we secured a rough coating. What we were striving for, and later secured, was a smooth coat without a glassy foundation. After an examination of this furnace, we were supplied with this same refractory slightly altered and using this material continuously at first, applications made every week and later every two weeks or more, we eventually had this furnace in such excellent condition that it was in better shape at the end of 29 months than when we started with this work. This condition at the end of 29 months is shown in Fig. 3.

The results just shown were attained by means of a continuous maintenance program with a refractory material used as patching. This method is eminently satisfactory where it is necessary to keep the old furnace in operation. During the period indicated by the foregoing 4400 lb. of material were used for this work. At the time this paper is being written no material has been applied for the past three months aside from 200 lb. of material used in an emergency on July 10 of this year when the arch lost a number of nose tile exposing the iron work supports. At this time we had a very heavy load and could not spare the boiler. The method of handling the case is interesting in that it shows the possibilities for emergency work. We opened up the draft on the boiler to cool it down as quickly as possible. As soon as it was sufficiently cooled we sent men into the furnace and applied the patching material direct to the iron work and building it up about 3-inch thick. This was not a very desirable practice from a labor point of view as the furnace was down only 6 hours and the men worked under a great difficulty on account of the heat. However, this held until over the week end when we were able to clean off this material and reset new tile. This arch is still in good condition and at this time is 34 months old.

In our No. 2 furnace the arch and side walls were placed in service July 9, 1921. During the latter part of the month of July, and during August and September, 1922, this furnace was given a coating of the same refractory product used on Unit No. 1. This material was applied both by hand and by trowel, and while our results later showed this method was not a good one to follow, it did give us good results. Our first spalling on this arch occurred in October, 1922, and was patched with this refractory material. On December 11, 1922, the photograph was taken of this work after 1 year and 5 months service. This photograph is reproduced as Fig. 4. When one considers that the previous life of our arches never exceeded 9 months, the wonderful results secured by this method of treatment is at once evident.

FIG. 3

**Saving Effected**

In August, 1922, we were faced by the coal shortage occasioned by the miners' strike. Our stokers were overlayed with brick and oil burners temporarily installed. This furnace was maintained in the condition shown in Fig. 4 until June, 1923, at which time we relaid this arch, departing from the previous practice in that we set the arch brick with a thin slurry of this refractory product as a bond. After drying the setting, the joints were tuck-pointed with the same material. This arch was then coated with a thin coat, by spraying it with a spray gun. This arch was inspected regularly every time the boiler was down for cleaning and wherever the coating showed signs of wearing away the surfaces were recoated in the manner above described. This furnace after being treated in this manner is shown in Fig. 5 after 1 year and 5 months service. As you will notice from the photograph it is in as good condition today as the day the arch was set up. The side walls in this photo-

FIG. 4

FIG. 5

graph were approximately three years old and have been maintained more than twice their normal life by a like method of treatment. This furnace is still in service at the present time and is in as good condition as shown in Fig. 5. The arch is now 28 months old and the side walls have been in service for about 4 years. In other words, both arch and side walls of the furnace have already

FIG. 6

lasted about three times their previous life. It required 600 lb. of material costing $30 to set this arch initially and it has required approximately $280 worth of material to keep this furnace in condition continuously resulting in a saving on arch tile alone of $400.

In our No. 3 furnace we set up a new arch on November 27, 1921 applying a thin surface coating in the manner previously described, The condition of this furnace on October 24, 1922 is shown in Fig. 6. This furnace had been operated with oil burners that were temporarily installed and inasmuch as these oil burners were intended only for a temporarily installation during the coal strike no

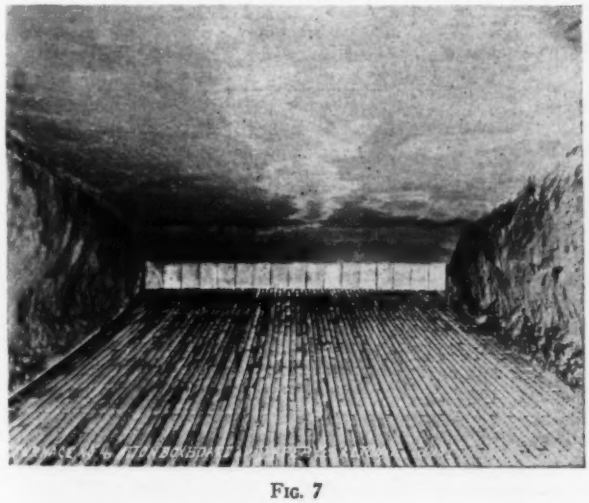

FIG. 7

changes were made in the furnace, with the result that these burners developed unfavorable conditions that were very severe on refractories. The results were highly gratifying when one considers the adverse condition under which this furnace operated. This furnace has been maintained continuously in the manner described in connection with the other furnaces.

The practice in our plant at the present time is to scale off such loose pieces as are evident in the photograph as these come off very easily and then give the furnace a wash coat with a spray gun or brush. The furnace is generally put right back in service immediately when necessary, as this is generally the case. Fig. 7 is a photograph taken January 10, 1923 in furnace No. 4 showing

FIG. 8

the condition in which we leave the arch after such a spray coating has been applied. Fig. 8 is the interior of furnace No. 5 taken on November 18th, 1923, after a period of one year's operation under continuous maintenance plan. This as you will recall is the boiler that was operated with under grate blowers and our flow meter indicates that we carry continuously 225 per cent to 250 per cent rating.

In April of this year we cut in a new unit which is a horizontal straight tube boiler as shown in Fig. 9. After cutting in this

FIG. 9

new unit we were able to remove the forced draft equipment from the old No. 5 furnace. This new unit operates continuously at a rating of 250 per cent and often considerably exceeds this on peak load conditions. The wear on refractories is especially severe inasmuch as it has a furnace volume of 2300 cu. ft. and a ratio of heating surface to furnace volume of 2.28. The fire brick lining is

13½ inches in front and 9 inches back of the bridge wall. The furnace is lined with 4½ inches of insulating brick. We have found that with the severe conditions which we have in ths furnace the plan of continuous maintenance is working quite satisfactorily.

Our practice in the construction and maintenance of our furnace is as follows: Our refractories are stored under conditions where they are not subjected to moisture and consequently are not damaged by freezing and the disintegrating effect of open storage. When we are laying up a furnace we place our brick on the job; when ready to commence laying, turn the hose on them to thoroughly saturate the brick with water. This practice allows the brick to be cut and shaped much more easily than when bone dry and in addition prevents the premature hardening of the bonding material, thus enabling the workmen to tamp the brick down in such a manner as to secure a very thin joint. When our furnace is laid up we apply a thin wash coat, hardly 1/32 inch, of a surface coating material. We make a regular practice to inspect the condition of the lining at every opportunity and whenever the coating shows signs of wearing away, we have a new coat applied to the eroded areas. Whenever the brick or tile spalls, we fill the cavity with a mixture of ground fire brick and some of the refractory coating material.

### What Experience Has Shown

Our experience has shown that rammed linings are not altogether suitable for furnaces operated under stoker fire conditions, nor is the method using a plastic material successful where this material is applied in thick coats with a trowel. We find that materials applied in thick layers with a cement gun are equally uneffective. The reason for this is apparent. If the coating is to give protection it must be highly refractory and a highly refractory material will not mature except in exceedingly thin wash coats. It is at once evident that any material which will mature in thick layers will not possess sufficient refractoriness to withstand the destructive action of combustion. Our results have shown that when the material is applied in a thin wash and that this material is neutral alike to the furnace gases and the brickwork and of sufficient refractoriness to withstand the conditions of operation maximum results are then secured. We have also found that this surface coating protection prevents the transfer of some materials from the brickwork, which materials are rendered volatile at high temperatures. When these constituents are rendered volatile their migration from the brickwork is easy and after having left the brickwork, this brickwork is then more or less dead and without strength.

### Cost of Maintenance

Our results have shown that it costs approximately 36 cents per hp. installed per year for maintenance under the program which we have followed, when starting with an old furnace. Of course it is understood that enough of the furnace brickwork must remain in order to provide some means for attachment of the patching materials. Where we have started with the new lining we have a cost of 15 cents to 18 cents per horepower per year to maintain this furnace in operating condition. On our various furnaces we have saved 68 per cent of the previous cost of refractories and installation labor as a maximum and 25 per cent saving in case where we commenced operations with the No. 1 furnace, which furnace we were ready to rebuild at the time we started with this new program. The best practice of course would be the installation of new furnaces commencing the coating treatment immediately. It is demonstrated however that furnaces may be brought back into better condition under the method which has been described in this paper.

The bonding material which we used is of such a texture that when mixed with water, ready for use, it has a consistency about like thick cream, free from grit and coarse particles. These properties are of great importance since they permit making brick joints of extreme thinness. We have found that this plan gives a twofold economy, in the first place, the amount of bonding material used is less than half the usually required amount; secondly, we have found that the wall laid brick to brick last much longer, since erosion takes place much more rapidly around the corners of a brick where these are exposed to the action of a flame.

These conditions are applicable to plants operating around 200 per cent to 250 per cent of rating. Where conditions are less severe, even greater savings are possible. In fact, the writer has seen this same program followed out in other plants where the cost of maintenance has been cut in two.

In conclusion it is to be remembered that the periodical repair and rebuilding will not be satisfactory and that these results cannot be obtained by an occasional treatment but must be followed out consistently by continuously maintaining the furnaces.

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## Use of Sulphur in Soda Pulp Cooking

The following inquiry has been received from a member:

"I know that some pulp mills in United States are using in addition to soda ash or salt cake also a quantity of sulphur.

This interests me very much and, so that I can form an opinion for myself re this, I should be very much obliged if you would kindly give me a reply to the following questions:

1. In the mills adding sulphur to the liquor, do they use sodium sulphate or soda ash (sodium carbonate) in the recovery plant?
2. What influence has the sulphur on the color and the strength of the pulp? Is sulphur also used in the manufacture of genuine kraft pulp?
3. How much sulphur is necessary to use in order to obtain any visible result? How many parts of sodium sulphide are usually in the cooking liquor and what is the amount of total alkaline in it?
4. Has there been found any bad effect by the increased sulphur amount on the rotary, the leaching tanks, the causticizing tanks, the digesters or on any other part of the equipment of the plant?
5. Does the smell, coming from the recovery plant, become more disagreeable by employing sulphur?
6. At what stage of the alkaline recovery operation is the sulphur added to the liquor?"

A transcript of the replies received prior to February 1 will be distributed in blank to those participating in the discussion. Answers should be sent promptly.

SECRETARY,
Technical Association of the Pulp & Paper Industry.

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## Warns Against Freight Increases

[FROM OUR REGULAR CORRESPONDENT.]

SPRINGFIELD, Mass., January 13, 1925.—W. H. Day, Traffic Manager of the Boston Chamber of Commerce, speaking before the Springfield Chamber of Commerce last week which met with the manufacturers, warned them that unless a strong united effort was made to turn back the proposed freight rate increases proposed in a plan made by railroad officials, Springfield and New England might write "finish" to their commercial fortunes. The plan, he said, which was drawn up by the Trunk Line association at the request of the Interstate Commerce Commission, fails to follow the orders of that body not to increase the revenue of the railroads, and discriminates in four or six classifications against New England. At the close of the meeting it was decided to secure the appointment of a local committee that should keep in touch and co-operate with the New England Traffic League, which is taking the initiative in protecting New England's interests, and which will carry the fight to Washington when the hearing on the freight rate adjustment opens. It is felt that the local manufacturers must practically open their books to the Traffic League Committee in order to present the matter before the Interstate Commerce Commission in such a way as to insure the preservation and expansion of New England's industries.

# INDEX OF TECHNICAL SECTION, VOLUME 79, PAPER TRADE JOURNAL

(July to December, 1924)

COMPILED BY CLARENCE J. WEST, CHAIRMAN, COMMITTEE ON ABSTRACTS AND BIBLIOGRAPHY

As in preceding indexes, the pages in the following index refer to the continuous paging of the Technical Section and have no relation to the paging of the individual numbers of the PAPER TRADE JOURNAL. In the present volume, pages 87 to 97 inclusive were repeated (numbers 10 and 11) and for indexing purposes the pages in number 11 are designated as a; pages 175 and 176 were also repeated and those two pages in number 13 are likewise designated with an a. References to abstracts are preceded by the letter A, those to patents by the letter P. Other entries refer to original articles appearing in the Technical Section; author entries for these articles are in capitals. No author entries are given for the abstracted articles.

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Section of the

# COST ASSOCIATION OF THE PAPER INDUSTRY

*Affiliated with*

THE AMERICAN PAPER AND PULP ASSOCIATION

Conducted by THOS. J. BURKE, C.A., Sec-Treas

## THE LABOR PROBLEM*

ADAM WILKINSON, LABOR COMMISSIONER AMERICAN WRITING PAPER CO., HOLYOKE, MASS.

I was rather pleased to hear the trend of the remarks made by several of the speakers yesterday and today in regard to the labor end and its relationship to the cost man. What I might say might be assumed to be more or less critical of the cost accountant. I assure you I wish you to regard me as a friend rather than a critic or a fault-finder. Your Cost Association of course is very young, some five or six years old, despite the fact that the parent organization in the paper and pulp industry is practically fifty years old. It seems they didn't feel the necessity of cost information for the first forty years of their existence but I think today everybody realizes the necessity for it. That is true of the management, but it is not true when we get back down to the man in the mill. I doubt very much whether he appreciates the necessity for cost work. It is with that phase of the situation that I wish to deal.

I could possibly discourse on the general subject of labor but that is a matter that is neither timely nor proper right now. There is not much difference between the average workman and the executive in his ideals. His ideals are more or less the same. While we may become concerned at times about the attitude of American labor, I hardly think it is necessary to get worked up about it. American labor is ambitious, of course, and sometimes difficult to deal with but nevertheless, the fact remains American industry has made tremendous advancement. We know they are the best paid workers in the world and while they are always wanting more, they aren't any different than the man who wears a white collar. I find the same dissatisfaction with office and mill help when it comes to wages. I was amused at the statement which had a great deal of truth in it, which Secretary of Labor Davis made. He said American labor had more gold in its teeth than European labor had in the bank. Possibly that is true. If that is a comparison between American labor and European labor, we ought to have no fears about the situation.

### Reducing Production Costs

At the present time, practically every manufacturer in any line of industry is confronted with the necessity of reducing production costs and at first thought, the average man feels the only way to get the production cost down is to cut wages. At the present time, I don't believe that there is any possibility of wages being reduced to any great extent. As long as other values remain unadjusted and as long as the cost of living stays at its present levels, wage cuts would be of no value. They would only produce irritation and restricted output. So we have to get a reduction in production costs through some other methods. That means of course that we have got to improve our methods of manufacture and understand where the leaks can be stopped and eliminate a great deal of the wastage we now find in industry. There is a great need of educating to be done in the paper industry in regard to this question of costs. I find that the average mill man really doesn't understand the cost accountant. He doesn't understand what it is all about. He is not in sympathy with it, in fact, in most cases he shows a spirit of open hostility towards the cost man. That is true from the supenintendent down to the average skilled worker, with the result that many of the reports that the Cost Department secure from the mills are based on erroneous figures. A great deal of guesswork is used and it is the elimination of that guesswork that we are trying to bring about. I admit the very nature of the paper industry does not lend itself readily to standard methods and the very process of making papers is difficult and impossible, at times, to measure. We ought to be able to do it with more accuracy than it is being done today.

One of the things necessary in order to bring that about would be for the man in the mill to assimilate some of the viewpoints the cost accountant now has. The cost accountant has to sell himself to the man in the plant and I think that I am not mistaking the situation when I say the latter doesn't understand the cost man. He doesn't understand what it is all about, hence, the cost man worries about not getting reports from the mill and really the fault lays at his door for most men in any walk of life, it they don't understand a thing will feel indifferent about it.

Miss Kiely said yesterday (and it was a very important thing to my mind) "Even if standards are established they won't mean anything unless they are frequently checked." At the present time the standards are not established with any great degree of accuracy and when you do get them established, you have to frequently check them.

### Need for Co-operation

I think the cost men possibly stay in the office a little too much. In order to be successful, you have to get into the mill a little more, to get to understand the men on the job and get their co-operation and you have to do frequent checking in order to assure yourself of correct information. I think the average man in the mill feels cost work is principally for inventory purposes. I wonder how many cost men feel that is the principal purpose of cost work. To my mind that is a simple matter so far as inventory is con-



* Address delivered at Cost Conference held by Cost Association of the Paper Industry at Commodore Hotel, New York City, December 10, 11 and 12, 1924, and discussion which followed.

cerned and cost work ought to produce more than that. It ought to be helpful in many respects not only for the purpose of understanding how large or how small or how much depreciation we find in our inventories and until the cost man gets that idea over to the men in the mill, the cost work itself is not going to be of much value for manufacturing purposes.

Last week I jotted down a few paragraphs which will probably invoke some discussion on this question of cost work and its relationship to labor. It is possible some of the things that I have jotted down here have been said here before, but perhaps I might say them in a little different manner. I would rather that we would attempt to discuss this thing rather than lecture on the subject. While these brief paragraphs are not in any sense in proper sequence, they are a few thoughts which came into my head as to cost work and its relationship to labor. After I read them, possibly we can discuss the thing in an informal manner.

### Cost Work in Relation to Labor

Production costs are claiming a larger share of attention in the paper industry than ever before. More efficient manufacturing methods; more efficient labor; and the elimination of waste are necessary to the progress of the industry.

The very nature of the business of paper manufacturing demands a high degree of intelligence and efficiency among workmen. Success or failure depends upon the human element.

The executive and the men he gathers around him recognize the necessity of a cost system that will give approximately correct results. The educating of foremen and workmen in costs and cost finding is essential to the successful operation of any cost system.

It is not too much to say that the average papermaker regards the cost system with a spirit of indifference, and a cost report appears to him as complex as an income tax form.

The viewpoint of the man in the mill towards the cost system largely depends on the knowledge he has of the subject. If he assumes an indifferent attitude it is not an unusual one, for men in all walks of life generally assume an indifferent attitude towards things they fail to understand.

The cost accountant must realize that the average man in the mill is usually a man of limited education, and if he fails to understand the cost report it is largely due to the fact that the cost accountant has failed to make his report meet the requirements of the situation.

The cost accountant must use initiative and tact so that in his contact with the man in the mill a spirit of mutual helpfulness will be created.

He must study the problems of the mill in order to secure the proper standards of measurement.

He must have in mind that it is necessary to do frequent checking in the mill in order to secure correct information.

He must have in mind that he can help to decrease waste and stop leaks.

He must have in mind that his work can be helpful in securing increased production.

He should produce reports that are understandable by workmen as well as executives.

The opportunity for the cost accountant to become a more important factor in industry presents itself if he will but regard his job not merely as an accumulator of data and a tabulator of figures, but rather that of an actuary upon whose work largely depends the success or failure of the business.

### What a Cost Accountant Ought to Be

Perhaps I have emphasized my opinion of what a cost accountant ought to be in that last statement. That is practically the thing I wanted to put over to you that the opportunity for the cost accountant to become a more important factor in industry presents itself if he will but regard his job not merely as an accumulator of data and a tabulator of figures but rather that of an actuary upon whose work largely depends the success or failure of the business. I think that is practically what Jordan told you in his address. I wonder if we are going to be able in the future to get cost men of that type. It depends upon the cost men themselves. I think the opportunities are great for the cost man in industry if he would only understand the magnitude of his job. It is true he has to have some engineering ability, but there is a large field and an important field which from the standpoint of labor needs to be explored a little more by the cost clerk himself.

I shall certainly be glad to answer any questions which you may have. I don't believe much can be gotten out of meetings of this kind unless we have a round table discussion instead of reading lengthy papers. I will be glad to give the viewpoint of the man in the mill as I see it and his attitude toward cost work, the cost system and the cost accountant.

### Discussion

PRESIDENT REILLY: Mr. Wilkinson is a man well posted on labor matters in our industry and possibly he can give you some suggestion as to how you can put your ideas across in your own plant.

SECRETARY BURKE: This is too big a problem to pass up. I wish we could loosen up these meetings and get some of you to tell us a little of your early experiences in getting correct cost figures from the men in the mill.

MR. KOENIG: For the last nine months, we have had meetings among our superintendents and mill foremen to discuss all matters of cost regarding productive and non-productive departments, service departments—the fact Jordan stressed so strongly—and we found in the beginning they were not much interested but as time went on, they were always keen on getting actual cost sheets. We are distributing copies from the General Superintendent down to the workman boss. Those copies are returned to the office after ten days and at that time a monthly meeting is called and those different costs are discussed. We have made great success in this way with this cost system. We have interested our men and we are assured the data as it is coming in now is quite correct. That is all I can say.

SECRETARY BURKE: That is very interesting and I am going to call on somebody else. I think Mr. Hyde might tell us something about this.

MR. J. E. HYDE: I am not keen on these meetings Koenig mentioned. I think the question of getting correct labor figures is mainly one of organization all the way down the line. I think Whitman of our Company can tell us his idea of getting figures from the mill.

MR. WHITMAN: Apparently we have little difficulty in getting our figures of labor, especially our direct labor; as brought out, there should be no difficulty in getting those figures anyway.

In our plant particularly there seems to be very good co-operation between the department superintendents and the different foremen in those departments and I find if there are any figures coming through that I have any doubt about whatever, I feel sure of their co-operation in straightening matters out. I occasionally have to go into the mill and go over some of the small propositions with them. I can readily see where there might be a great deal of difficulty and feeling between the cost men and the superintendents but we are especially fortunate in our mill in that respect.

SECRETARY BURKE: You attribute it to the fact that your superintendent, Mr. Davis, is sold on the problem of getting cost figures and sees to it that you get them?

MR. WHITMAN: That is about the idea. All the department superintendents and even the foremen seem to be well in accord with our ideas.

SECRETARY BURKE: Do the men themselves fill in the reports or do you have cost clerks that go into the mill for the information?

MR. WHITMAN: Largely the men themselves. We find we have very little trouble with them.

SECRETARY BURKE: Do they make accurate reports?

MR. WHITMAN: They do very well indeed. There are very few mistakes.

MR. HYDE: I want to add one word there on labor costs. It has always been my idea an important thing is the cost of the job or the cost of the order or the work that you are doing. With that idea in mind your problem is simplified. We keep our time on the basis of jobs or order costs.

PRESIDENT REILLY: Have you any standards to compare actual performance with?

MR. HYDE: Oh, yes, we are working it out.

MR. BURKE: Are you doing that yourself?

MR. HYDE: It is all done within our own organization.

QUESTION: I would like to ask Mr. Koenig what information the foremen and superintendents get.

MR. KOENIG: The information regarding service and non-productive departments. We segregate those costs monthly.

I think the men report correctly. I was thinking about the general cost sytsem and the interest in soliciting this from our men.

PRESIDENT REILLY: We find it of more interest to the foremen and superintendents to give them as brief a report as possible on items they have absolute control over and I think that has been growing very, very much the last few years and the majority of men that talk on this subject seem to feel that way. I think it is better to give as brief a statement as possible and give them a report on the elements of cost that they have actual supervision over, although at the same time it is all right to let him have the total cost and let him have an idea of what the big expenses are in that department because by getting the production from a certain department, he might think he is reducing his cost to a certain extent on those three items you give him but it is well to show him the great saving he is making when he is getting greater production taking all items of cost into consideration. It works both ways. I would like to ask Mr. Wilkinson just one question, that is, I imagine many of you men in going through your plant talking with the various employees sooner or later will have this question put up to you: Just how do Labor Unions take to the subject of costs. Are they with us or against us in our pursuit for cost information?

MR WILKINSON: I haven't discovered any opposition from Labor Unions to cost work. Of course the uninformed man might misconstrue the attitude of the cost accountant. He might assume the cost accountant at times is the same type and doing the same kind of work as the fellow with the stop watch. I don't believe it is possible to get any degree of socalled education to the men in the mills such as mathematics. It is not necessary to think that you have to educate the men in the accounting methods to get them to understand the "why" of the cost system. What we want to do is to get education of an informative nature on these subjects. I think if the men understand the purpose of cost work, they will be more helpful to the cost accountant. I don't see why the cost accountant shouldn't be as familiar with the men in the mill whom he relies upon for figures. His work should be as helpful to the men in the mill as it is to the men in the office. We want to get a cost system that will help the men in the mill. Too many men regard the cost work as not being helpful to them. They can't see it. They view it from the standpoint of inventory purposes. We ought to develop it through the cost system, a system of measurements whereby we can tell what the wastage is; we can show where the leaks are; we can help to stimulate production. We haven't brought it to that point yet; this is one of the features the cost accountant himself must sell. He must sell that idea to the man in the plant. So many men in the mills couldn't understand the "why" of the cost system. There is the great possibility of being helpful to the men in the mill, help them to do their work better than they did it before. Most men desire to do better work if they knew how to do it. They will do what is right if they know they are right. In that respect the cost accountant can help a great deal.

MEMBER: I have very little to add that is new to what has already been said, but I suppose our situation is a little bit different than most mills because I think we have gone a little further with detailed time studies than the average mill has. When they first started doing that, I guess you remember there was some opposition to it on the part of the men. They didn't like the fellow to get out the stop watch and see what they were doing. They have found in the course of time that it pays them and beyond a little kidding back and forth between the man who is being studied and the man with the stop watch, there are no remarks questioned. That work has gone across in good style. It has worked out to their advantage and to ours. The matter of furnishing the foremen with records of what is happening in their departments is with us as it is with you. We give them a record of cost of the items directly under their control and they are discussed in foremen's meetings once every four weeks. We still have them every week. The foremen of the paper mill get together. The superintendent is well sold on co-operation with the cost department using it all the time. We get along very well and have no trouble. There have been attempts to unionize the men. The management has not tried to prevent the union agents or give them opposition. They tell them to go ahead and hear what they have to say. In every case, the men turned it down. They felt they were getting along well without outside interference.

QUESTION: What has been your experience in the attitude of the men in the mill in regard to reporting to the Accounting Department in their record of a day's work? That is, taking two common methods, one where we may have a clerk in the room, at the completion of each job the employee turns over to that clerk the jobs as they are completed and the clerk records their time. On the other hand the employee is given a time card and you say to him, "Jack, we are depending on you to make out your own time, starting and stopping." What is your experience in regard to the attitude of the employee in regard to those two methods?

MR. WILKINSON: I think when the employee is required to turn in his own time, he very rarely makes a mistake along that line. He certainly has the number of hours. But when it comes to allocating the time to the various job orders, he is different about that and may be careless about splitting up his eight hours on three or however many jobs he may be working on, so long as it is at the same rate of pay. That will upset your cost system. There is necessity for constant checking on the part of the cost clerk himself because it is obviously simple the employee doesn't appreciate the value and the necessity of putting in his time correctly for the benefit of the cost accountant. All he is interested in is putting his time in there. He is liable to put eight hours on one job when he spent it on two jobs unless he is sold the idea that he must put it in where it belongs.

PRESIDENT REILLY: I think we can sum this up in a few words by saying it is up to the cost man to sell himself successfully to the men in the mill equally as well as you do your executives, for without the proper cooperation by the men in the plant, you will be unable to hand satisfactory correct reports to your executives and oftentimes, many reports have been turned into the executives that have been based upon inaccurate figures and it is apt to cause serious results to your plant.

No cost meeting of the Cost Association of the Paper Industry would be a success or complete unless we heard from our good friend, Seth Bush. This man has attended every convention we have had and has always given the best he had in him and it is with great pleasure that I am not going to introduce to you but simply say Seth Bush is going to talk to us. (Applause).

MR. SETH BUSH: Mr. President, my voice has been heard in these meetings so often, I am very much afraid anything I may have to say would be more tiresome than helpful. At the same time, I am glad to bring one thought more or emphasize one thought more in connection with this subject of the labor side of our cost accounting work. As I think back a number of years, I remember

the time when it was an accepted fact that there would be a large amount of suspicion and suspicion amounting almost to antagonism many times on the part of the men in the mill against any suggestion of cost work. You who have been in the work for a good many years know what I mean when I speak of that attitude of mind so prevalent a number of years ago. It does seem to me especially in our paper industry we have gone far enough in cost work so that somehow a different feeling has permeated throughout our plants. Today I feel there is not in most paper manufacturing plants the suspicion and antagonism that there used to be. I am just as confident in many directions there is a grave lack of understanding and where the cost man of a number of years ago had to overcome not only suspicion but antagonism as well as misunderstanding, today he has to overcome largely only the misunderstanding end of it and now the one thing wanted to bring to your attention is that if you as cost men approach the men in the mill from the standpoint of eliminating that misunderstanding through education as education is thought of so often, you are going to have ill luck. The man in the mill does not want to be educated as we think of that term so often, any more than you want to have some one come in and educate you. He would like to know a lot of things better but he will resent it the same as you will resent a man taking the attitude of mind that he is superior mentally and that he is coming to you to educate you by some process of crowding it into your mind.

And so, when we are talking about correcting some of these misunderstandings, replacing a lack of understanding of what is desired in cost work and the value of it and so on, with a desire to help, let us remember that it can't be done merely through a process of cold education and the cost man who goes after the correction of that lack of understanding on the part of the men in the mill must do so from the standpoint of a friend to that man if he is going to have the largest success.

You know in your offices sometimes (I hope you haven't had this experience but I think most of you have) you have sat at the next desk to a man or woman who somehow or other you didn't get along with. You couldn't do the best work in cooperation with that person. If you haven't had that experience yourself, if you ever have had charge of a department you have seen two people in a given department who couldn't get along nicely together just because one of those people didn't have the faculty of, in a friendly way, cooperating with the other party and there are too many cost men not only in the paper industry but in many industries, too many cost men who are thinking so much of cost and educating the other fellow that they forget they must be a friend to him. Make of yourselves as cost men the kind of a man whom everybody likes to know, likes to do business with and likes to do things for and approach the men in the mill as a man after your own desires, your own ambitions. Approach him with that kind of spirit; be a friend to him; be a real fellow yourself and you will have no trouble in educating him to your point of view so long as your point of view is right.

## Western Board Co. Increases Directorate

KALAMAZOO, Mich., January 12, 1925.—Winship A. Hodge, secretary and general manager of the Western Board and Paper Company, was added to the directorate of that corporation at the annual meeting, held Thursday afternoon in the company's offices. This increases the board from five to six, the other members being F. M. Hodge, A. E. Curtenius, W. H. Scott, Michael Redmond and Charles G. Bard. At the same time Mr. Curtenius was re-elected president of the concern, W. H. Scott, vice president; Michael Redmond, treasurer and Winship A. Hodge, secretary. During the past twelve months this plant has been able to increase its average daily output by 40 per cent and is now making improvements and installing equipment that will still further augment production.

# New York Trade Jottings

The Bedford Paper Box Company has increased its capital stock from $30,000 to $50,000.

* * *

The Liberty Paper Company, Inc. has moved from 501 Fifth avenue to 296 Madison avenue.

* * *

Gesta P. Genberg of the Fraser Companies, Edmundston, N. B., was a New York visitor, January 7 and 8.

* * *

The Eastern Manufacturing Company of 501 Fifth avenue has moved to new offices at 296 Madison avenue.

* * *

W. W. Cronkite of the paper and power department of the General Electric Company, Schenectady, is spending several days here.

* * *

H. S. Taylor of Dayton and Montreal, President of the Technical Association of the Pulp and Paper Industry, was among the New York trade visitors last week.

* * *

Martin L. Griffin of North Dighton, Mass., formerly chief chemist of the Oxford Paper Company and now connected with the Mt. Hope Finishing Company, is in this city.

* * *

The American Paper and Pulp Association was represented Tuesday at a hearing held at 143 Liberty street by the Central Classification Committee on a change pertaining to paper winding tubes or cores. These tubes are used in News Print, Tissue and Converted Paper Products.

* * *

The Advisory Committee of the paper industry to the Department of Commerce will hold a meeting in New York city on February 4, at which time the work of the Paper Division of the Department will be considered. This will be a continuation of the conference held at Washington on December 18.

* * *

William H. Utz, vice-president and formerly European Director of Jenkins Brothers, Ltd., with headquarters at London, England, has been made director of sales of Jenkins Brothers of 80 White street, New York, valve manufacturers. He assumed his position on January 1 and will have general charge of the selling activities of the company.

* * *

Coy, Hunt & Co. have removed from 392 Lafayette street to larger and more spacious quarters in their own building at the corner of West Houston street and West Broadway. Increasing business made expansion necessary and the concern will occupy the entire six story and basement building. The "Major" quality papers will be greatly increased. An inside loading platform completes a modern shipping and receiving department at the new location. The trade is cordially invited to call and inspect the new quarters.

* * *

The Salesmen's Association at its weekly luncheon at Hotel Belmont, Monday, discussed business conditions for the first time this year. It was reported that business since the first of the year had undergone favorable development and that some excellent orders are being placed. C. W. Robbins, chairman of the convention committee, reported that every detail of the convention program had been completed with the exception of the selection of one of the speakers. It was also reported that tentative reservations for the banquet indicated that that function would have the largest attendance of any affair ever held by the association.

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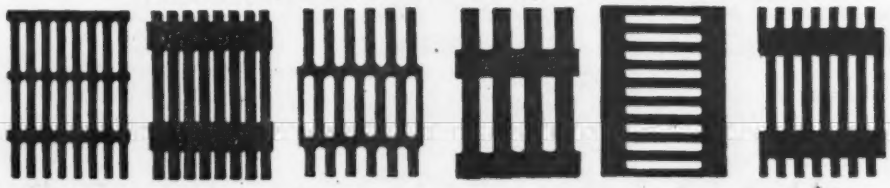

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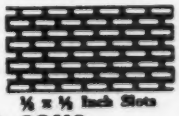

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# Imports of Paper and Paper Stock

## NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

## NEW YORK IMPORTS

WEEK ENDING JANUARY 10, 1925

### SUMMARY

Printing paper, .....270 bls., 78 cs., 696 rolls
Cigarette paper .....55 cs.
Wall paper .....11 bls., 5 cs.
Hangings .....746 bls., 6 cs.
Wrapping paper .....53 bls., 5 cs.
Colored paper .....21 cs.
Tissue paper .....26 cs.
Cardboard paper .....7 cs.
Silk Paper .....15 cs.
News print .....370 rolls, 21 bls.
Strand paper .....550 bdls.
Shelf paper .....14 cs.
Litho paper .....25 cs.
Metal paper .....2 cs.
Drawing paper .....4 cs.
Felt paper .....70 rolls
Surface coated paper .....213 cs.
Paint paper .....11 cs.
Miscellaneous paper....80 cs., 113 bls., 12 bdls.

### CIGARETTE PAPER

Liggett Myers Tobacco Co., Schodack, Havre, 25 cs.
F. P. Gaskell Co., by same, 30 cs.

### WALL PAPER

F. J. Emmerich, Ardiatic, Liverpool, 3 bls.
F. J. Emmerich, Cleveland, Hamburg, 4 bls.
A. C. Dodman, Jr., Inc., Lapland, Antwerp, 4 bls.
A. C. Dodman, Jr., Inc., by same, 5 cs.

### PAPER HANGINGS

Janeway & Carpender, Lapland, Antwerp, 343 bls.
J. N. Hampton, Jr., & Co., by same, 330 bls.
J. N. Hampton, Jr., & Co., by same, 330 bls.
W. H. S. Lloyd & Co., Menominee, London, 28 bls.
W. H. S. Lloyd & Co., by same, 6 cs.
W. H. S. Lloyd & Co., American Trader, London, 45 bls.

### NEWS PRINT

H. Reeve Angel & Co., Inc., Mt. Clay, Hamburg, 135 rolls.
J. P. Hefferman Paper Co., Lucia, Trieste, 21 bls.
Parsons & Whittemore, Cleveland, Hamburg, 235 rolls.

### PRINTING PAPER

Drinhausen Hollkott Paper Co., Cleveland, Hamburg, 14 bls.
Steffens, Jones & Co., Lapland, Antwerp, 2 cs.
P. Puttmann, by same, 13 cs.
J. H. Scott Paper Co., Mongolia, Hamburg, 560 rolls.
Seaman Paper Co., by same, 60 rolls.
Storr Bement & Co., by same, 206 bls.
H. Schulte & Co., Pres. Adams, Genoa, 16 cs.
B. F. Drakenfeld & Co., Adriatic, Liverpool, 7 cs.
C. G. Keferstein, Lucia, Trieste, 4 rolls.
C. G. Keferstein, by same, 1 ble.
Hudson Trading Co., Mt. Clay, Hamburg, 49 bls.
Hudson Trading Co., by same, 72 rolls.
F. C. Strype, Westerdyk, Rotterdam, 3 cs.
C. G. Keferstein, by same, 16 cs.
Steffens Jones & Co., Cleveland, Hamburg, 21 cs.

### STRAW PAPER

J. P. Hefferman Paper Co., Cleveland, Hamburg, 550 bdls.

### WRAPPING PAPER

Birn & Wachenheim, Cleveland, Hamburg, 5 cs.
W. Hartmann & Co., Inc., Mongolia, Hamburg, 53 bls.

### TISSUE PAPER

Wilkinson Bros. & Co., Inc., Pres. Adams, Genoa, 19 cs.
Brooks Paper Co., Adriatic, Liverpool, 3 cs.
Neidlich Process Co., Mt. Clay, Hamburg, 4 cs.

### SHELF PAPER

State Bank, Cleveland, Hamburg, 14 cs.

### COLORED PAPER

P. H. Petry & Co., Cleveland, Hamburg, 9 cs.
C. G. Keferstein, Mt. Clay, Hamburg, 9 cs.
C. G. Keferstein, Cleveland, Hamburg, 3 cs.

### LITHO-PAPER

J. H. & G. R. Siebold, Pres. Adams, Hong Kong, 25 cs.

### METAL PAPER

Heusel Bruckman & Lorbacher, Mt. Clary, Hamburg, 2 cs.

### DRAWING PAPER

Rohner & Gehrig, Mt. Clay, Hamburg, 4 cs.

### FELT PAPER

The Rubbercid Co., Eastern Dawn, Rotterdam, 70 rolls.

### SURFACE COATED PAPER

Globe Shipping Co., Pres. Roosevelt, Bremen, 50 cs.
P. C. Zuhlke, Lapland, Antwerp, 55 cs.
P. Puttmann, by same, 104 cs.
Gevaert Co. of America, by same, 4 cs.

### PAINT PAPER

Whiting Pattison, Inc., France, Havre, 11 cs.

### CARDBOARD PAPER

F. C. Strype, Westerdyk, Rotterdam, 7 cs.

### SILK PAPER

S. Gilbert, Westerdyk, Rotterdam, 15 cs.

### PAPER

J. P. Hefferman Paper Co., Mt. Clay, Hamburg, 8 cs.
Heusel Bruckman & Lorbacher, Pr. Roosevelt, Bremen, 7 cs.
P. Puttmann, Roma, Marseilles, 3 cs.
Japan Paper Co., by same, 15 cs.
E. H. Dansiger & Co., Inc., Cleveland, Hamburg, 3 cs.
Blauvelt Wiley Paper Mfg. Co., Columbia, Glasgow, 12 bdls.
A. Huerelman, Lapland, Antwerp, 2cs.
P. J. Schmeitzer, France, Havre, 27 cs.
Tiffany & Co., by same, 2 cs.
Guiboutfreres, by same, 13 cs.
Gallagher & Ascher, Menominee, London, 3 cs.
J. A. Mibila & Co., Mongolia, Hamburg, 113 bls.

### RAGS, BAGGINGS ETC.

P. Berlowitz, Caucasier, Antwerp, 312 bls. rags.
Anglo South American Trust Co., by same, 289 bls. rags.
National Bank of Commerce, by same, 97 bls. rags.
Brown Bros. & Co., Boston City, Bristol, 99 bls. rags.
American Exchange National Bank, by same, 843 bls. rags.
Royal Manufacturing Co., M. Dollar, Vancouver, 50 bls. cotton waste.
Katzenstein & Keene, Inc., Galileo, Hull, 274 bls. rags.
Goldman, Sachs & Co., Mt. Clay, Hamburg, 36 bls. rags.
Belgium Bank, by same, 70 bls. rags.
A. W. Fenton, Inc., London Commerce, London, 70 bls. rags.
S. Birkenstein, Sons, Eastern Dawn, Rotterdam, 170 bls. rags.
E. J. Keller Co., Inc. Eastern Dawn, Mannheim, 297 bls. rags.
E. J. Keller Co., Inc., Eastern Dawn, Rotterdam, 516 bls. rags.
E. J. Keller Co., Inc., by same, 415 bls. baggings.
Castle & Overton, Inc., by same, 175 bls. baggings.
Castle & Overton, Inc., by same, 175 bls. baggings.
R. Blank, by same, 174 bls. rags.
J. J. Patricoff, by same, 135 bls. rags.
American Woolstock Corp., by same, 104 bls. rags.
Equitable Trust Co., Columbia, Glasgow, 90 bls. paperstock.
State Bank, by same, 72 bls. paperstock.
Anglo South American Trust Co., by same, 135 bls. rags.
E. J. Keller Co., Inc., Pres. Roosevelt, Bremen, 179 bls. rags.
Brown Bros. & Co., by same, 250 bls. rags.
Brown Bros. & Co., American Trader, London, 25 bls. rags.
Castle & Overton, Inc., London Commerce, London, 40 bls. rags.
Castle & Overton, Inc., Adriatic, Liverpool, 105 bls. rags.
Castle & Overton, Inc., Westerdyk, Rotterdam, 128 bls. rags.
G. M. Graves & Co., Inc., by same, 74 bls. rags.
G. M. Graves & Co., Inc., by same, 346 bls. baggings.
E. Butterworth Co., Inc., by same, 177 bls. baggings.
Darmstadt, Scott & Co., by same, 41 bls. rags.
E. J. Keller Co., Inc., by same, 636 bls. rags.
Brown Bros. & Co., by same, 259 bls. rags.
Chemical National Bank, by same, 41 bls. rags.
The Stone Bros. Co., Inc., by same, 29 bls. rags.
M. O'Meara Co., by same, 46 bls. burlaps.
A. W. Fenton, Inc., by same, 83 bls. rags.
G. W. Miller & Co., Inc., by same, 30 bls. new cuttings.
S. Silberman, by same, 29 bls. rags.
Belgian Bank, Cleveland, Hamburg, 51 bls. rags.
Bankers Trust Co., by same, 111 bls. rags.
W. Schall & Co., by same, 14 bls. rags.
Equitable Trust Co., by same, 13 bls. rags.
Patterson National Bank, by same, 22 bls. rags.
Katzenstein & Keene, Inc., by same, 313 bls. rags.
L. H. Abenheimer, by same, 70 bls. rags.
M. Omeara Co., Docket, Genoa, 191 bls. rags.
E. J. Keller Co., Inc., Docket, Leghorn, 52 bls. rags.
E. J. Keller Co., Inc., Roma, Marseilles, 77 bls. rags.
Katzenstein & Keene, Inc., Menominee, London, 106 bls. rags.
State Bank, by same, 108 bls. rags.
Amsinck Sonne & Co., Inc., by same, 16 bls. rags.
Textile Waste Merchandising Co., Coer d'Alene, Adexandria, 105 bls. rags.
A. W. Fenton, Inc., Angiolina, Leghorn, 409 bls. rags.
E. J. Keller Co., Inc., by same, 202 bls. rags.
G. Garignes, by same, 34 bls. rags.
The Stone Bros. Co., Inc., Schodack, Havre, 198 bls. rags.
Lipman Woolstock Co., by same, 64 bls. wool rags.
P. Berlowitz, by same, 412 bls. rags.
American Exchange National Bank, by same, 40 bls. rags.
E. J. Keller Co., Inc., by same, 292 bls. rags.
Burmon & Bclowsky, by same, 39 bls. rags.
E. J. Keller Co., Inc., Schodack, Dunkirk, 7 bls. rags.
M. O'Meara Co., by same, 101 bls. rags.
The Stone Bros. Co., Inc., by same, 159 bls. rags.
R. Bishop Mfg. Co., by same, 279 bls. rags.
G. W. Millar Co., Inc., by same, 54 bls. rags.
Atlantic Exchange Bank & Trust Co., by same, 142 bls. rags.

(Continued on page 62)

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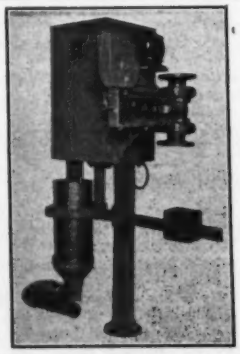

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**TRIMBEY MACHINE WORKS, Glens Falls, N. Y.**

# Imports of Paper and Paper Stock

(Continued from page 60

Castle & Overton, Inc., by same, 162 bls. rags.
Reis & Co., by same, 38 bls. thread waste.
Royal Manufacturing Co., Nessian, Manchester, 107 bls. cotton waste.
American Exchange National Bank, by same, 127 bls. new cuttings.
Katzenstein & Keene, Inc., by same, 70 bls. new cuttings.
Katzenstein & Keene, Inc., by same, 109 bls. rags.
Ayres, W. C. Jones, Inc., by same, 15 bls. cotton waste.
Equitable Trust Co., by same, 32 bls. bagging.
Guaranty Trust Co., by same, 38 bls. bagging.
A. W. Fenton, Inc., Mongolia, Hamburg, 117 bls. rags.
E. J. Keller Co., Inc., by same, 135 bls. rags.
Belgian Bank, by asme, 30 bls. rags.
American Exchange National Bank, Rhode Island, Leith, 210 bls. bagging.
Brown Bros. & Co., by same, 31 bls. rags.
National City Bank, Rhode Island, Dundee, 777 bls. paper stock.
W. Schall & Co., by same, 85 bls. paper stock.
Irving Bank Columbia Trust Co., by same, 166 bls. paper stock.
Katzenstein & Keene, Inc., Armands, Venice, 502 bls. rags.
Castle & Overton, Inc., Virgilia, London, 56 bls. rags.
Castle & Overton, Inc., Assyria, Glasgow, 127 bls. rags.
Castle & Overton, Inc., Suffren, Havre, 19 bls. rags.
E. J. Keller Co., Inc., Idaho, Antwerp, 183 bls. rags.
E. J. Keller Co., Inc., Veendam, Rotterdam, 481 bls. rags.
E. J. Keller Co., Inc., by same, 71 bls. baggings.
G. M. Graves Co., Inc., by same, 107 bls. bagging.
R. Blank, by same, 17 bls. bagging.
R. Blank, by same, 128 bls. rags.
First National Bank of Boston, by same, 29 bls. rags.
Chemical National Bank, by same, 40 bls. rags.
Castle & Overton, Inc., by same, 33 bls. rags.

OLD ROPE

Brown Bros. & Co., Boston City, Bristol, 205 coils.
M. Wolfer, Siboney, Havana, 50 bls.
M. Wolfer, by same. 24 bdls.
Brown Bros. & Co., Galileo, Hull, 8 bls.
Brown Bros. & Co., by same, 243 coils.
Castle & Overton, Inc., London Commerce, London, 22 coils.
Castle & Overton, Inc., Mongolia, Hamburg, 108 coils.
American Exchange National Bank, Rhode Island, Leith, 62 coils.
International Acceptance Bank, Veendam, Rotterdam, 48 coils.
Brown Bros. & Co., by same, 168 coils.
A. Searle, Schodack, Havre, 12 coils.
A. Searle, by same, 4 bls.
International Purchasing Co., by same, 27 coils.
International Purchasing Co., Cleveland, Hamburg, 24 coils.
Brown Bros. & Co., by same, 32 coils.
W. Schall & Co., by same, 67 coils.
M. O'Meara Co., Dochet, Genoa, 476 coils.
W. Schall & Co., Dochet, Leghorn, 80 coils.
Brown Bros. & Co., Lapland, Antwerp, 62 bls.

MANILA ROPE

Republic Bay & Paper Co., Pres. Adams, Manila, 952 coils.

WOOD PULP

M. Gottesman & Co., Inc., Westerdyk, Rotterram, 1,000 bls. wood pulp.
J. Andersen & Co., Mongolia, Hamburg, 675 bls. sulphite pulp.
National City Bank, by same, 660 bls. chemical pulp.
Lagerloef Trading Co., West Gotomska, 5,504 bls. chemical pulp.
Ira L. Beelie & Co., Mongolia, Konigsberg, 2,100 bls. wood pulp.
Castle & Overton, Inc., by same, 140 bls. wood pulp.

WOODPULP BOARDS

Old Master Paper Pulp Corp., Lucia, Trieste, 10 bls.

WOOD FLOUR

The Bakelite Corp., Eastern Dawn, Rotterdam, 723 bags—52,655.
A. Kramer & Co., Inc., Westerdyk, Rotterdam, 800 bags.

CASEIN

Kalbfleisch Corp., American Legion, B. Aires, 834 bags.
Irving Bank Columbia Trust Co., Marmonides, B. Aires, 417 bags.

CHINA CLAY

C. T. Wilson & Co., Inc., Boston City, Bristol, 25 casks.
National City Bank, by same, 535 bags.

## PHILADELPHIA IMPORTS

WEEK ENDING JANUARY 10, 1925

E. H. Bailey & Co., Rhode Island, Leith, 56 cs. paper.
Katzenstein & Keene, Inc., by same, 111 bls. rags.
Katzenstein & Keene, Inc., by same, 57 bls. bagging.
S. Birkenstein Sons, London Commerce, London, 90 bls. rags.
Katzenstein & Keene, Inc., by same, 147 bls. rags.
Guaranty Trust Co., by same, 159 bls. rags.
Equitable Trust Co., by same, 84 bls. waste paper.
Penn. Rags & Metal Co., by same, 186 bls. bagging.
E. J. Keller Co., Inc., Eastern Dawn, Rotterdam, 275 bls. rags.
E. J. Keller Co., Inc., by same, 93 bls. bagging.
D. I. Murphy, by same, 183 bls. rags.
S. Birkenstein, Sons, by same, 77 bls. rags.
Castle & Overton, Inc., by same, 61 bls. rags.
Castle & Overton, Inc., Dochet, Genoa, 39 bls. rags.
The Stone Bros. Co., Inc., by same, 385 bls. rags.
S. Birkenstein Sons, by same, 22 bls. rags.
F. Whittaker & Co., Inc., Schodack, Havre, 11 bls. rags.
G. Mathes Co., by same, 54 bls. bagging.
S. Birkenstein Sons, by same, 24 bls. new cuttings.
C. Webb & Co., by same, 56 bls. rags.
Penn Rags & Metal Co., by same, 31 bls. rags.
Salomon Bros. & Co., by same, 62 bls. rags.
Castle & Overton, Inc., by same, 80 bls. rags.
Castle & Overton, Inc., by same, 25 bls. new cuttings.
Castle & Overton, Inc., by same, 32 bagging.
Katzenstein & Keene, Inc., by same, 170 bls. rags.
E. J. Keller Co., Inc., by same, 40 bls. rags.
D. I. Murphy, by same, 192 bls. rags.
McBlaine & Co., Schodack, Dunkirk, 63 bls. rags.
Rags & Metal Co., by same, 718 bls. rags.
Brown Bros. & Co., by same, 70 bls. rags.
Castle & Overton, Inc., by same, 159 bls. rags.
The Stone Bros. Co., Inc., by same, 528 bls. rags.
J. Walworth Sons, by same, 32 bls. rags.
Katzenstein & Keene, Inc., by same, 78 bls. rags.
E. J. Keller Co., Inc., Westerwald, Stockholm, 27 bls. rags.
E. J. Keller Co., Inc., Westerwald, Norkoping, 47 bls. rags.
E. J. Keller Co., Inc., Westerwald, Halmstad, 68 bls. rags.
E. J. Keller Co., Inc., Westerwald, Konigsberg, 39 bls. rags.
E. J. Keller Co., Inc., Manchester Importer, Manchester, 192 bls. bagging.
E. J. Keller Co., Inc., Eglantine, Rotterdam, 59 bls. bagging.
Castle & Overton, Inc., Mongolian Prince, England, 110 bls. rags.
Castle & Overton, Inc., Olen, France, 243 bls. rags.
Castle & Overton, Inc., Reiferker Maru, Germany, 89 bls. rags.
Castle & Overton, Inc., Cabo Hatteras, Italy, 269 bls. rags.
Katzenstein & Keene, Inc., Manchester Importer, Manchester, 219 bls. new cuttings.
Katzenstein & Keene, Inc., Narciisan, Antwerp, 415 bls. rags.
Katzenstein & Keene, Inc., Boschdyk, Rotterdam, 111 bls. rags.
Katzenstein & Keene, Inc., West Arrow, Anwerp, 384 bls. rags.
S. Birkenstein Son, London Commerce, London, 116 coils old rope.
Bernis Bros. Bag Co., Schodack, Havre, 62 coils old rope.
Old Colony Trust Co., Rhode Island, Leith, 90 coils old rope.
Old Colony Trust Co., by same, 8 bls. old rope.
Castle & Overton, Inc., Taurus, Christiania, 1,500 bls. wood pulp.

## CHARLESTON IMPORTS

WEEK ENDING JANUARY 10, 1925

E. J. Keller Co., Inc., Shickshinny, Rotterdam, 180 bls. bagging.

## NEW ORLEANS IMPORTS

WEEK ENDING JANUARY 10, 1925

Castle & Overton, Inc., Janelew, Germany, 50 bls. cotton tares.

## BOSTON IMPORTS

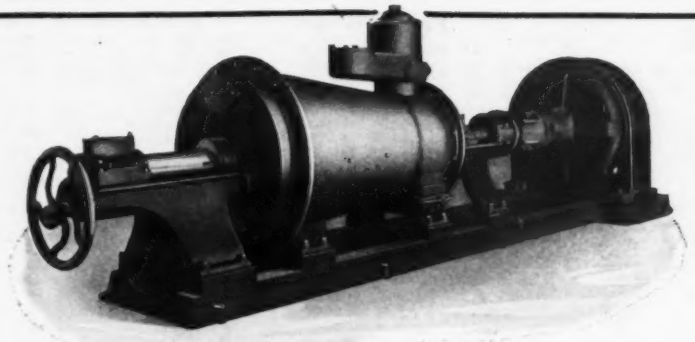
WEEK ENDING JANUARY 10, 1925

Dennison Manufacturing Co., Canadian Challenger, Auckland, 2 cs. crepe paper.
Crocker Burbank Co., Menominee, London, 501 bls. waste paper.
G. W. Millar Co., Inc., by same, 149 bls. waste paper.
Furness Withy & Co., Ltd., by same, 151 bls. rags.
Katzenstein & Keene, Inc., Darian, Manchester, 108 bls. rags.
Castle & Overton, Inc., West Haven, Rotterdam, 47 bls. rags.
Brown Bros. & Co., Meonminee, London, 48 bls. old rope.
Brown Bros. & Co., by same, 157 coils old rope.
Lagerlcef Trading Co., West Maximus, 4,209 bls. chemical pulp.
Castle & Overton, Inc., West Haven, Rotterdam, 1,023 bls. wood pulp.

## BALTIMORE IMPORTS

WEEK ENDING JANUARY 10, 1925

Castle & Overton, Inc., West Haven, Rotterdam, 835 bls. wood pulp.
Johaneson, Wales & Sparre, Inc., Jethou, France, 4,500 bls. kraft pulp.
Johaneson, Wales & Sparre, Inc., Jethou, Kramfors, 600 bls. sulphite pulp.
Johaneson, Wales & Sparre, Inc., Tortugas, Christiania, 1,000 bls. sulphite pulp.



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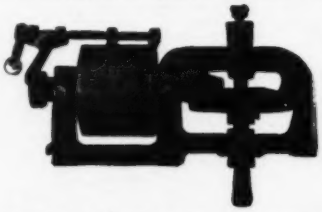

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# Market Quotations

Quoted by Hepburn & Co., No. 74 Broadway, N. Y. City, to whom all inquiry for quotations on these or any other Securities is referred.

| BONDS | BID | ASKED |
|---|---|---|
| Abitibi Power and Paper, Gen 6s 1940 | 98 | 100* |
| Advance Bag and Paper, 7s 1943 | 97 | 100* |
| Aroostook Pulp and Paper, 6s 1925 | 99 | ... |
| Bastrop Pulp and Paper, 7½s 1932 | 98 | 100* |
| Brompton Pulp and Paper, 6s 1927 | 93 | 95 |
| Beaver Board, 8s 1933 | 87 | 89 |
| Bedford Pulp and Paper, 6½s 1942 | 96 | ... |
| Berkshire Hills Paper Co., 8s 1941 | ... | 100 |
| Beaver Board, N. Y. Curb, 8s 1933 | 87 | 89 |
| Beaver Products Corp., 7½s 1942 | 102 | 104 |
| Belgo Canadian Paper, 6s 1943 | 97½ | 98½ |
| Brown Paper Co., 8s 1931 | 102 | 105* |
| Berlin Mills, 5s 1931 | 99 | ... |
| Bryant Paper Co., 6s 1942 | 97 | 100 |
| Brown Company Serial, 6s 1925-43 | 97 | 100 |
| Central Paper, 6½s 1925-42 | 90 | 95 |
| Cape Breton Pulp and Paper, 6s 1932 | 100 | 102 |
| Carthage Sulphite Pulp and Paper, 8s 1941 | 40 | 50 |
| Champion Coated Paper Co., 6s 1924-34 | ... | 102 |
| Champion Fibre Co. Notes, 8s 1930 | 102 | ... |
| Cherry River Paper, 5s 1929 | 97 | 100* |
| Chicoutimi Pulp Co., 6s 1942 | 63 | ... |
| Donnaconna Paper Co., Ltd., 6s 1940 | 98 | 100 |
| Eddy Paper, 7s 1931 | 96 | ... |
| Eagle Paper, 6½s 1932 | 96 | 100 |
| Escanaba Paper, 6s 1933 | 84 | 88 |
| Fox River Paper, 7s 1931 | 100 | ... |
| Fort Orange Paper Co, 7s 1942 | 90 | ... |
| Eddy Paper Co., 7½s 1931 | 95 | 98 |
| Gilbert Paper Co., 7s 1927 | 97 | ... |
| Gilbert Paper Co., 6½s 1923-29 | 100 | 102* |
| Hammermill Paper Co., 6s 1930-39 | 98 | 101 |
| Hummell, Ross Film Corp., 7s 1925 | 90 | ... |
| Jessup & Moore Paper Co., 6s 1939 | 92 | 96 |
| Kenmore Pulp and Paper Co., 6s 1937 | 91 | ... |
| Lake Superior Pulp and Paper, 6s 1941 | 102 | ... |
| Mattagami Pulp and Paper 1st, 6s, 1937 | 30 | 40 |
| Marinette & Menominee, 7½s 1936 | 103 | 105 |
| Mead Pulp and Paper, 7s 1925-29 | 96 | 99 |
| Mengel Company, 7s 1934 | 100 | 103 |
| National Paper and Type, 6s 1947 | 96 | 99* |
| Oswego Falls Corp., 8s 1942 | 101 | ... |
| Orono Pulp and Paper, 5s 1941 | 93 | 96* |
| Orono Pulp and Paper, 6s 1943 | 97 | 100* |
| Oxford Paper Co., 6s 1947 | 99 | 101 |
| Paterson Parchment Paper, 5½s 1927-28 | ... | 100 |
| Paterson Parchment, 6s 1938 | 96 | 99 |
| Parker, Young Co., 6½s 1944 | 92 | 96 |
| Price Bros. & Co., Ltd., 6s 1943 | 98 | 100 |
| Provincial Paper Mills, Ltd., 6s 1940 | 97 | ... |
| Riordan Co., Series A, 8s 1940 | 90 | 93 |
| Riordan Pulp and Paper, Ltd., 6s 1929 | 24 | 28 |
| River Raisin Paper, 8s 1936 | 102 | 105 |
| St. Regis Paper, 6½s, 1929-39 | 97 | 102 |
| Smith (Howard) Paper Mills, 7s 1941 | 90 | 93 |
| Smith (Howard) Paper Mills, 6s 1934 | 93 | ... |
| St. Croix Paper, 5s 1923-37 | 95 | ... |
| Stevens & Thomson Paper, 6s 1942 | 86 | 90 |
| Spanish River Pulp and Paper, 6s 1931 | 105 | ... |
| Spanish River Pulp and Paper, Gen 8s 1941 | 107 | 109 |
| Ticonderoga Pulp and Paper Co., 6s, 1940 | 91 | 95 |
| Ticonderoga Pulp & Paper 1-5, 1930 | 85 | 90 |
| Whittaker Paper, 1942 | 96 | 99 |
| Watab Paper Co., 6½s 1942 | 98 | 101 |
| Waterway Paper Products, 7s 1924-27 | 95 | 100 |
| Wayagamack Pulp and Paper, Ltd., 6s 1951 | 84 | 88* |

| STOCKS | BID | ASKED |
|---|---|---|
| Abitibi Power and Paper, Com | 62 | 63 |
| Abitibi Power and Paper, Pfd | 98½ | 103 |
| Advance Bag and Paper, Com | 8 | 12* |
| Advance Bag and Paper, Pfd | 70 | 75* |
| Beaver Board, Com | 5 | 8 |
| Beaver Board, Pfd | 38 | 41 |
| Bryant Paper, Cap | 12 | ... |
| Bryant Paper, Pfd | 9 | ... |
| Brompton Pulp and Paper, Cap | 29 | 32 |
| Chicago Mill & Lumber Co., Com | 63 | ... |
| Chicago Mill & Lumber Co., Pfd | 98 | 101 |
| Crown Williamette, Com | 93 | 98* |
| Crown Williamette, 7% A, Pfd | 98 | SW |
| Donnaconna Paper, Pfd | 95 | 100 |
| Great Northern Paper, Cap | 220 | 250 |
| Howard Smith Paper Co., Com | 22 | 23 |
| Howard Smith Paper Co., Pfd | 74 | 76 |
| Jessup & Moors Paper, Pfd | 75 | 80 |
| International Paper Co., Com | 50 | 53 |
| International Paper Co., Pfd | 71 | 73 |
| Mengel Company, Com | 30 | 31½ |
| Mengel Company, Pfd | 72* | 76 |
| Oxford Paper Co., Pfd | 93 | 95 |
| Provincial Paper Co., Com | 90 | 100 |
| Provincial Paper Co., Pfd | 95 | 98 |
| Price Brothers, Cap | 36 | 38 |
| St. Maurice Paper Co., Cap | 83 | 88 |
| St. Regis Paper Co., Cap | 24 | 27 |
| Smith (Howard) Paper Co., Ltd., Com | 29 | 31 |
| Smith (Howard) Paper Co., Ltd., Pfd | 80* | 84 |
| Spanish River Pulp and Paper, Com | 101 | 103 |
| Spanish River Pulp and Paper, Pfd | 111 | 113 |
| Ticonderoga Pulp and Paper, Cap | 145 | ... |
| Union Bag and Paper, Cap | 48 | 50 |
| United Paper Board, Cap | 52 | 55* |
| West Virginia Pulp and Paper, Cap | 25 | .. |
| West Virginia Pulp & Paper, Pfd | 85 | .. |
| Whittaker Paper, Com | 12 | 20 |
| Whittaker Paper, Pfd | 42 | 46 |

*Nominal.

## Paper

(F. o. b. Mill)

| | | |
|---|---|---|
| Ledgers | 11.00 | @38.00 |
| Bonds | 9.00 | @45.00 |
| Writings— | | |
| Extra Superfine | 14.00 | @30.00 |
| Superfine | 14.00 | @30.00 |
| Tub Sized | 10.00 | @15.00 |
| Engine Sized | 8.00 | @11.00 |
| News— | | |
| Rolls, contract | 3.50 | @ 3.90 |
| Rolls, transit | 3.75 | @ 4.25 |
| Sheets | 4.00 | @ 4.25 |
| Side Runs | 3.25 | @ 4.00 |
| Book, Cased— | | |
| S. & S. C. | 7.00 | @ 9.75 |
| M. F. | 6.50 | @ 8.75 |
| Coated and Enamel | 9.00 | @15.00 |
| Lithograph | 9.00 | @14.00 |
| Tissues— | | |
| White No. 1 | .70 | @ .90 |
| White No. 2 | .70 | @ .80 |
| Colored | .95 | @ 1.90 |
| Anti-Tarnish | 1.40 | @ 2.30 |
| Kraft | .90 | @ 1.00 |
| Manila | .75 | @ .80 |
| Kraft— | | |
| No. 1 Domestic | 5.50 | @ 6.25 |
| No. 2 Domestic | 5.00 | @ 5.50 |
| Imported | 5.50 | @ 5.75 |
| Manila— | | |
| No. 1 Jute | 9.00 | @ |
| No. 2 Jute | 7.75 | @ 8.50 |
| No. 1 Wood | 4.75 | @ 5.25 |
| No. 2 Wood | 4.00 | @ 4.50 |
| Butchers | 3.75 | @ 4.00 |
| Fibre Papers— | | |
| No. 1 Fibre | 5.50 | @ 6.00 |
| No. 2 Fibre | 4.75 | @ 5.25 |
| Common Bogus | 2.50 | @ 2.75 |
| S. Screening | 3.25 | @ 3.75 |
| Card Middler | 4.00 | @ 5.00 |
| Boards—per ton— | | |
| News | 45.00 | @47.50 |
| Straw | 50.00 | @55.00 |
| Chip | 42.50 | @45.00 |
| Binders' Boards | 75.00 | @80.00 |
| Sgl. Mla. Ll. Chip | 55.00 | @62.50 |
| Wood Pulp | 70.00 | @75.00 |
| Container | 62.50 | @67.50 |
| Sulphate Screenings— | | |
| Coarse | .80 | @ .90 |
| Refined | 1.75 | @ 2.00 |
| Ground Wood— | | |
| Screenings | 20.00 | @25.00 |
| Glassine— | | |
| Bleached, basis 25 lbs. | 12.00 | @15.00 |
| Bleached, basis 20 lbs. | 14.00 | @17.00 |

## Mechanical Pulp

(Ex-Dock)

| | | |
|---|---|---|
| No. 1 Imported | 32.00 | @38.00 |

(F. o. b. Mill)

| | | |
|---|---|---|
| No. 1 Domestic | 30.00 | @35.00 |

## Chemical Pulp

(Ex-Dock, Atlantic Ports)

| | | |
|---|---|---|
| Sulphite (Imported)— | | |
| Bleached | 3.85 | @ 4.50 |
| Easy Bleaching | 2.90 | @ 3.20 |
| No. 1 strong unbleached | 2.75 | @ 3.25 |
| No. 2 strong unbleached | 2.50 | @ 2.75 |
| No. 1 Kraft | 2.75 | @ 3.00 |
| Sulphate— | | |
| Bleached | 3.50 | @ 3.65 |

(F. o. b. Pulp Mill)

| | | |
|---|---|---|
| Sulphite (Domestic)— | | |
| Bleached | 3.75 | @ 4.50 |
| Easy Bleaching Sulphite | 2.75 | @ 3.25 |
| News Sulphite | 2.45 | @ 2.75 |
| Mitscherlich | 3.00 | @ 3.50 |
| Kraft (Domestic) | 2.70 | @ 3.50 |
| Soda Bleached | 3.90 | @ 4.10 |

## Domestic Rags

New Rags

Prices to Mill, f. o. b. N. Y.

| | | |
|---|---|---|
| Shirt Cuttings— | | |
| New White, No. 1 | 15.00 | @16.00 |
| New White, No. 2 | 9.50 | @11.00 |
| Silesias No. 1 | 10.50 | @11.50 |
| New Unbleached | 13.50 | @14.50 |
| Washables | 6.50 | @ 9.25 |
| Fancy | 10.00 | @10.50 |
| Blue Overall | 10.50 | @11.50 |
| New Blue Prints | 7.50 | @ 8.50 |
| New Soft Blacks | 5.75 | @ 6.20 |
| Mixed Khaki Cuttings | 5.50 | @ 6.00 |
| Pink Corset Cuttings | 10.50 | @11.00 |
| Pink Muslin | 10.25 | @10.75 |
| New Light Seconds | 3.25 | @ 3.50 |
| O. D. Khaki Cuttings | 6.00 | @ 7.00 |
| Men's Corduroy | 6.00 | @ 6.75 |
| New Mixed Blacks | 4.00 | @ 5.00 |

Old Rags

| | | |
|---|---|---|
| White, No. 1— | | |
| Repacked | 8.00 | @ 9.00 |
| Miscellaneous | 6.50 | @ 7.00 |
| White, No. 2— | | |
| Repacked | 4.75 | @ 5.25 |
| Miscellaneous | 4.00 | @ 4.50 |
| St. Soiled, White | 3.25 | @ 3.75 |
| Thirds and Blues— | | |
| Repacked | 4.25 | @ 4.50 |
| Miscellaneous | 3.25 | @ 3.50 |
| Black Stockings | 4.00 | @ 4.50 |
| Roofing Rags— | | |
| Cloth Strippings | 3.15 | @ 3.25 |
| No. 1 | 3.15 | @ 3.25 |
| No. 2 | 3.05 | @ 3.15 |
| No. 3 | 2.00 | @ 2.25 |
| No. 4 | 2.75 | @ 2.85 |
| No. 5A | 1.80 | @1.50 |

## Foreign Rags

| | | |
|---|---|---|
| New Light Silesias | 9.50 | @10.50 |
| Light Flannelettes | 11.00 | @12.00 |
| Unbl'chd Cottons | 13.00 | @14.00 |
| New White Cuttings | 14.00 | @15.00 |
| New Light Oxfords | 10.00 | @11.00 |
| New Light Prints | 9.00 | @10.00 |
| New Mixed Cuttings | 4.25 | @ 4.75 |
| New Dark Cuttings | 3.75 | @ 4.25 |
| No. 1 White Linens | 10.50 | @11.50 |
| No. 2 White Linens | 7.50 | @ 8.50 |
| No. 3 White Linens | 6.00 | @ 6.50 |
| No. 4 White Linens | 4.50 | @ 5.50 |
| Old Extra Light Prints | 4.75 | @ 5.50 |
| Ord. Light Prints | 4.25 | @ 4.75 |
| Med. Light Prints | 3.75 | @ 4.25 |
| Dutch Blue Cottons | 4.50 | @ 5.00 |
| Ger. Blue Cottons | 4.25 | @ 4.50 |
| Ger. Blue Linens | 4.50 | @ 5.00 |
| Checks and Blues | 3.75 | @ 4.00 |
| Linsay Garments | 3.25 | @ 3.50 |
| Dark Cottons | 3.20 | @ 3.35 |
| Shoppery | 3.05 | @ 3.15 |
| French Blues | 4.25 | @ 4.75 |

## Bagging

Prices to Mill F. o. b. N. Y.

| | | |
|---|---|---|
| Gunny No. 1— | | |
| Foreign | 3.15 | @ 3.30 |
| Domestic | 3.25 | @ 3.40 |
| Wool, Tares, light | 3.00 | @ 3.10 |
| Wood, Tares, heavy | 3.10 | @ 3.20 |
| Bright Bagging | 2.90 | @ 3.05 |
| Mixed Bagging | 2.40 | @ 2.50 |
| Sound Bagging | 2.50 | @ 2.75 |
| Roofing Bagging | 2.30 | @ 2.40 |
| Manila Rope— | | |
| Foreign | 6.50 | @ 7.00 |
| Domestic | 6.50 | @ 7.00 |
| New Bu. Cut | 3.50 | @ 4.00 |
| Hessian Jute Threads— | | |
| Foreign | 4.00 | @ 4.25 |
| Domestic | 3.25 | @ 3.50 |

## Old Waste Papers

(F. o. b. New York)

| | | |
|---|---|---|
| Shavings— | | |
| Hard, White, No. 1 | 3.60 | @ 3.90 |
| Hard, White, No. 2 | 3.25 | @ 3.50 |
| Soft, White, No. 1 | 3.00 | @ 3.10 |
| Flat Stock— | | |
| Stitchless | 1.45 | @ 1.55 |
| Overissue Mag | 1.45 | @ 1.55 |
| Solid Flat Book | 1.40 | @ 1.50 |
| Crumpled No. 1 | 1.25 | @ 1.35 |
| Solid Book Ledger | 1.80 | @ 1.90 |
| Ledger Stock | 1.60 | @ 1.70 |
| New B. B. Chips | .65 | @ .75 |
| Manilas— | | |
| New Env. Cut | 2.45 | @ 2.60 |
| New Cut. No. 1 | 1.75 | @ 2.00 |
| Extra No. 1 old | 1.40 | @ 1.50 |
| Print | 1.20 | @ 1.30 |
| Container Board | 1.00 | @ 1.10 |
| Bogus Wrapper | 1.00 | @ 1.10 |
| Old Krafts Machine compressed bales | 2.05 | @ 2.15 |
| News— | | |
| No. 1 White News | 1.95 | @ 2.10 |
| Strictly Overissue | 1.05 | @ 1.15 |
| Strictly Folded | .95 | @ 1.05 |
| No. 1 Mixed Paper | .65 | @ .75 |
| Common Paper | .45 | @ .55 |

## Twines

| | | |
|---|---|---|
| Cotton—(F. o. b. Mill)— | | |
| No. 1 | .43 | @ .48 |
| No. 2 | .41 | @ .43 |
| No. 3 | .40 | @ .42 |
| India. No. 6 basis— | | |
| Light | .19 | @ .20 |
| Dark | .17 | @ .19 |
| B. C., 18 basis | .39 | @ .41 |
| A. B. Italian, 18 Basis | .51 | @ .52 |

| | | | |
|---|---|---|---|
| Finished Jute— | | | |
| Dark, 18 basis | .30 | @ | .31 |
| Light, 18 basis | .28 | @ | .30 |
| Jute Wrapping, 3-6 Ply— | | | |
| No. 1 | .20 | @ | .23 |
| No. 2 | .18 | @ | .20 |
| Tube Rope— | | | |
| 4-ply and larger. | .15 | @ | .17 |
| Fine Tube Yarn— | | | |
| 5-ply and larger. | .20 | @ | .28 |
| 4-ply | .21 | @ | .24 |
| 3-ply | .22 | @ | .25 |
| Unfinished India— | | | |
| Basis | .14 | @ | .15 |
| Paper Makers' Twine | | | |
| Balls | .12 | @ | .13 |
| Box Twine, 2-3 ply | .14 | @ | .15 |
| Jute Rope | .20 | @ | .40 |
| Amer. Hemp, 6 | .30 | @ | .32 |
| Sisal Hay Rope— | | | |
| No. 1 Basis | .14 | @ | .16 |
| No. 2 Basis | .10 | @ | .12 |
| Sisal Lath Yarn— | | | |
| No. 1 | .14 | @ | .15 |
| No. 2 | .11 | @ | .13 |
| Manila Rope | .18 | @ | .19 |

## CHICAGO

### Paper

F. o. b. Mill

| | | | |
|---|---|---|---|
| All Rag Bond | 35 | @ | 40 |
| No. 1 Rag Bond | 25 | @ | 35 |
| No. 2 Rag Bond | 14 | @ | 25 |
| Water Marked Sulphite | 9 | @ | 12 |
| Sulphite Bond | 7 | @ | 10¼ |
| Sulphite Ledger | 9½ | @ | 12 |
| Superfine Writing | 18 | @ | 24 |
| No. 1 Fine Writing | 14 | @ | 18 |
| No. 2 Fine Writing | 12 | @ | 14 |
| No. 3 Fine Writing | 9 | @ | 12 |
| No. 1 M. F. Book | 5¼ | @ | 7½ |
| No. 1 S. & S. C. Book | 6¼ | @ | 7¾ |
| Coated Book | 8 | @ | 10 |
| Coated Label | 8 | @ | 10 |
| News—Rolls, mill— | 3½ | @ | 4¼ |
| News—Sheets, mill. | 3¾ | @ | 4¾ |
| No. 1 Manila | 4½ | @ | 5½ |
| No. 1 Fibre | 4¾ | @ | 5¾ |
| No. 2 Manila | 3½ | @ | 4 |
| Butchers' Manila | 3¾ | @ | 4¼ |
| No. 1 Kraft | 5¼ | @ | 6¼ |
| No. 2 Kraft | 5.25 | @ | 5.50 |
| Wood Tag Boards | 4¼ | @ | 6 |
| Sulphite Screenings | 2.75 | @ | 3.00 |
| Manila Tissue, 24x36 sheet | 7 | @ | 7¾ |
| White Tissue, 20x30 sheet | 7 | @ | 7¾ |
| Boards, per ton— | | | |
| Plain Chip | 50.00 | @ | 52.50 |
| Solid News | 52.50 | @ | 55.00 |
| Manila Line Chip | 57.50 | @ | 60.00 |
| Container Lined— | | | |
| 85 Test | 70.00 | @ | 72.50 |
| 100 Test | 75.00 | @ | 77.50 |

### Old Papers

F. o. b. Chicago

| | | | |
|---|---|---|---|
| Shavings— | | | |
| No. 1 Hard White | 3.50 | @ | 3.60 |
| White Envel. Cuttings | 3.50 | @ | 3.60 |
| No. 1 Soft Shav. | 3.25 | @ | 3.35 |
| No. 1 Mixed | 1.90 | @ | 1.95 |
| No. 2 Mixed | 1.75 | @ | 1.80 |
| Ledger and Writings | 1.65 | @ | 1.70 |
| Solid Books | 1.55 | @ | 1.60 |
| No. 1 Light Books | 1.20 | @ | 1.25 |
| Blanks | 2.15 | @ | 2.25 |
| Manila Envelope Cuttings | 2.75 | @ | — |
| Ex. No. 1 Manila | 2.60 | @ | 2.65 |
| Print Manila | 1.25 | @ | 1.30 |
| Folded News (overissue) | 1.15 | @ | 1.20 |
| Old Newspapers— | | | |
| No. 1 | 1.05 | @ | 1.10 |
| No. 2 | .90 | @ | .95 |
| Mixed Papers— | | | |
| No. 1 | .95 | @ | 1.00 |
| No. 2 | .85 | @ | .90 |
| Straw Clippings | .95 | @ | — |
| Binders' Clippings | .90 | @ | — |
| Kraft | 2.35 | @ | 2.40 |
| New Kraft Cuts | 2.70 | @ | 2.75 |
| Roofing Stock, f. o. b. Chicago, Net Cash— | | | |
| No. 1 | 53.00 | @ | — |
| No. 2 | 51.00 | @ | — |
| No. 3 | 49.00 | @ | — |
| No. 4 | 43.00 | @ | — |

## BOSTON

### Paper

| | | | |
|---|---|---|---|
| Ledgers— | | | |
| Sulphite | .08½ | @ | .18 |
| Rag Content | .18 | @ | .36½ |
| All Rag | .38 | @ | .50 |
| Bonds— | | | |
| Sulphite | .07½ | @ | .14 |
| Rag Content | .16 | @ | .33½ |
| All Rag | .36½ | @ | .51 |
| Writings | .08½ | @ | .20 |
| Superfines | .20 | @ | .48 |
| News | .04 | @ | .06½ |
| Book, M. F. | .06¼ | @ | .10¾ |
| Book, Super | .07½ | @ | .11 |
| Book, Coated | .09½ | @ | .20 |
| Coated Litho. | .10 | @ | .15 |
| Label | .09½ | @ | .15 |
| Jute Manila No. 1. | .12 | @ | .13 |
| Manila, Sul. No. 1. | .05 | @ | .06 |
| Manila, Sul. No. 2. | .03¾ | @ | .04½ |
| No. 1 Kraft | .06¼ | @ | .06½ |
| No. 2 Kraft | .05¾ | @ | .05½ |
| Common Bogus | .03½ | @ | .04 |
| Straw Board | 50.00 | @ | 55.00 |
| News Board | 45.00 | @ | 47.50 |
| Chip Board | 42.50 | @ | 45.00 |
| Single Manila Pulp lined board | 57.50 | @ | 60.00 |
| Single White, patent coated board | 75.00 | @ | 85.00 |
| Wood Pulp Board | 80.00 | @ | 85.00 |
| Binder Boards | 75.00 | @ | 85.00 |
| Tarred Felts— | | | |
| Regular | 61.00 | @ | 63.00 |
| Slaters | 66.00 | @ | 68.00 |
| Best Tarred, 1 Ply, roll | 1.50 | @ | 1.60 |
| Best Tarred, 2 Ply, roll | 1.70 | @ | 1.80 |
| Best Tarred, 3 Ply, roll | 2.00 | @ | 2.10 |

### Old Papers

| | | | |
|---|---|---|---|
| Shavings— | | | |
| No. 1 Hard White | 4.00 | @ | 4.25 |
| White Blank News | 1.75 | @ | 2.00 |
| Manila Env. Cuttings | 2.80 | @ | 3.00 |
| No. 2 Hard White | 3.25 | @ | 3.50 |
| No. 1 Soft White | 3.10 | @ | 3.25 |
| No. 2 Soft White | 2.25 | @ | 2.50 |
| No. 1 Mixed | 1.60 | @ | 1.75 |
| No. 2 Mixed | 1.25 | @ | 1.50 |
| Solid Ledger Stock | 2.00 | @ | 2.25 |
| Writing Paper | — | @ | 1.70 |
| No. 1 Books, Heavy | 1.60 | @ | 1.80 |
| No. 1 Books, Light | 1.40 | @ | 1.50 |
| No. 1 New Manila | 2.50 | @ | 2.60 |
| No. 1 Old Manila | 1.75 | @ | 2.00 |
| Print Manila | 1.05 | @ | 1.20 |
| Old Kraft | 2.00 | @ | 2.25 |
| Overissue News | 1.00 | @ | 1.20 |
| Old Newspapers | .90 | @ | 1.00 |
| No. 1 Mixed Paper | .60 | @ | .65 |
| Box Board, Chip | .60 | @ | .65 |

### Bagging

Price f. o. b. Boston

| | | | |
|---|---|---|---|
| Gunny No. 1— | | | |
| Foreign | 1.12½ | @ | 2.00 |
| Domestic | 2.00 | @ | 2.12½ |
| Manila Rope | 6.00 | @ | 6.50 |
| Mixed Rope | 1.50 | @ | 1.62½ |
| Scrap Burlaps | 1.25 | @ | 1.50 |
| Wool Tares, heavy | 2.00 | @ | 2.13 |
| Mixed Strings | 1.50 | @ | 1.62½ |
| New Burlap Cuttings | 2.00 | @ | 2.25 |

### Domestic Rags (New)

Price f. o. b. Boston

| | | | |
|---|---|---|---|
| Shirt Cuttings— | | | |
| New White No. 1 | .13½ | @ | .14 |
| Silesias, No. 1 | .09 | @ | .09½ |
| New Unbleached | .12½ | @ | .13 |
| Washable | .06 | @ | .06½ |
| Fancy | .07 | @ | .07¼ |
| Cottons — according to grades, Blue Overall | .09½ | @ | .10 |
| New Blue | .05½ | @ | .06 |
| New Black, soft | .06 | @ | .06¾ |
| Khaki Cuttings | .05½ | @ | .06 |
| Corduroy | .04 | @ | .04½ |
| New Canvas | .10½ | @ | .11 |

### Domestic Rags (Old)

Price f. o. b. Boston

| | | | |
|---|---|---|---|
| White No. 1— | | | |
| Repacked | 7.50 | @ | 8.00 |
| Miscellaneous | 6.50 | @ | 7.00 |
| White No. 2— | | | |
| Repacked | 5.50 | @ | 6.00 |
| Miscellaneous | 4.75 | @ | 5.50 |
| Thirds and Blues— | | | |
| Repacked | 3.75 | @ | 4.00 |
| Miscellaneous | 3.00 | @ | 3.25 |
| Roofing Stock— | | | |
| No. 1 | 2.25 | @ | 2.37 |
| No. 2 | 2.12½ | @ | 2.25 |
| No. 3 | 1.50 | @ | 1.75 |
| No. 4 | 1.15 | @ | 1.20 |

## PHILADELPHIA

### Paper

| | | | |
|---|---|---|---|
| Bonds | .09 | @ | .53 |
| Ledgers | .13½ | @ | .40 |
| Writings— | | | |
| Superfine | .13½ | @ | .20 |
| Extra fine | .12 | @ | .22 |
| Fine | .20 | @ | .26½ |
| Fine, No. 2 | .16 | @ | .25 |
| Fine, No. 3 | .12 | @ | .20 |
| Book, M. F. | .08 | @ | .11 |
| Book, S. S. & C. | .09¼ | @ | .12½ |
| Book, Coated | .11½ | @ | .20 |
| Coated Lithograph | .10 | @ | .13 |
| Label | .10 | @ | .13 |
| News | .04¾ | @ | .05 |
| No. 1 Jute Manila | .12 | @ | .13 |
| Manila Sul., No. 1 | .07 | @ | .10 |
| Manila No. 2 | .06 | @ | .08 |
| No. 2 Kraft | .05 | @ | .08 |
| No. 1 Kraft | .07 | @ | .08 |
| Common Bogus | .03½ | @ | .04 |
| Straw Board | 55.00 | @ | 60.00 |
| News Board | 42.50 | @ | 45.00 |
| Chip Board | 42.50 | @ | 45.00 |
| Wood Pulp Board | 2.75 | @ | 3.00 |
| (Carload Lots) | | | |
| Binder Boards— | | | |
| Per ton | 70.00 | @ | 75.00 |
| Carload lots | 65.00 | @ | 70.00 |
| Tarred Felts— | | | |
| Regular | 61.00 | @ | 63.00 |
| Slaters | 66.00 | @ | 68.00 |
| Best Tarred, 1-ply (per roll) | 1.70 | @ | 1.80 |
| Best Tarred, 2-ply (per roll) | 1.50 | @ | 1.60 |
| Best Tarred, 3-ply | 2.00 | @ | 2.10 |

### Bagging

F. o. b. Phila.

| | | | |
|---|---|---|---|
| Gunny, No. 1— | | | |
| Foreign | 1.75 | @ | 1.85 |
| Domestic | 1.65 | @ | 1.70 |
| Manila Rope | 5.75 | @ | 6.00 |
| Sisal Rope | 2.50 | @ | — |
| Mixed Rope | 1.25 | @ | — |
| Scrap Burlaps | 1.65 | @ | 1.70 |
| Wool Tares, heavy | 2.00 | @ | 2.13 |
| Mixed Strings | 1.00 | @ | — |
| No. 1, New Lt. Burlap | 3.50 | @ | 3.75 |
| New Burlap Cuttings | 3.75 | @ | — |

### Old Papers

F. o. b. Phila.

| | | | |
|---|---|---|---|
| Shavings— | | | |
| No. 1 Hard White | 3.65 | @ | 3.70 |
| No. 2 Hard White | 3.25 | @ | 3.40 |
| No. 1 Soft White | 2.75 | @ | 3.00 |
| No. 2 Soft White | 2.05 | @ | 2.25 |
| No. 1 Mixed | 2.00 | @ | — |
| No. 2 Mixed | 1.25 | @ | 1.30 |
| Solid Ledger Stock | 1.75 | @ | 1.90 |
| Writing Paper | 1.50 | @ | 1.75 |
| No. 1 Books, heavy | 1.45 | @ | 1.60 |
| No. 2 Books, light | 1.15 | @ | 1.25 |
| No. 1 New Manila | 2.40 | @ | 2.50 |
| No. 1 Old Manila | 1.50 | @ | 1.75 |
| Container Manila | 1.15 | @ | 1.20 |
| Old Kraft | 2.00 | @ | 2.25 |
| Overissue News | 1.05 | @ | 1.10 |
| Old Newspaper | .65 | @ | .70 |
| No. 1 Mixed Paper | .75 | @ | .80 |
| Common Paper | .60 | @ | .70 |
| Straw Board, Chip | .65 | @ | .70 |
| Binders Bd., Chip | .65 | @ | .70 |

Domestic Rags—New.

Price to Mill, f. o. b. Phila.

| | | | |
|---|---|---|---|
| Shirt Cuttings— | | | |
| New White, No. 1 | .13 | @ | .14 |
| New White, No. 2 | .07½ | @ | |
| Silesias, No. 1 | .08 | @ | .08¼ |
| New Unbleached | .12 | @ | .12¼ |
| Washable | .05½ | @ | .05¾ |
| Fancy | .07 | @ | .07¼ |
| Cottons—according to grades— | | | |
| Blue Overall | .08¾ | @ | .09 |
| New Blue | .04 | @ | |
| New Black Soft | .06 | @ | .06¼ |
| New Light Seconds | .03½ | @ | .03¾ |
| Khaki Cuttings | .05½ | @ | .06 |
| Corduroy | .04 | @ | .04½ |
| New Canvas | .09 | @ | .09½ |
| New Black Mixed | .05 | @ | .05¼ |

Old

| | | | |
|---|---|---|---|
| White, No. 1— | | | |
| Repacked | 7.00 | @ | 7.25 |
| Miscellaneous | 6.25 | @ | 6.50 |
| White, No. 2— | | | |
| Repacked | .05½ | @ | .05¾ |
| Miscellaneous | .05 | @ | .05¼ |
| Thirds and Blues— | | | |
| Repacked | 3.40 | @ | 3.60 |
| Miscellaneous | 3.15 | @ | 3.25 |
| Black Stockings | 4.00 | @ | 4.25 |
| Roofing Stock— | | | |
| No. 1 | 2.25 | @ | 2.35 |
| No. 2 | 2.15 | @ | 2.25 |
| No. 3 | 1.20 | @ | 1.30 |
| No. 4 | 2.10 | @ | 2.20 |
| No. 5A | 1.40 | @ | — |
| B | 1.25 | | nominal |
| C | 1.15 | | nominal |

## TORONTO

### Paper

(Mill Prices to Jobbers f. o. b. Mill)

| | | | |
|---|---|---|---|
| Bond— | | | |
| Sulphite | .11½ | @ | .12½ |
| Light tinted | .12½ | @ | .13½ |
| Dark tinted | .14 | @ | .15 |
| Ledgers (sulphite) | — | @ | .13 |
| Ledgers No. 1 | 34 | @ | |
| Ledgers No. 2 | 26 | @ | |
| Writing | .09½ | @ | |
| Writing S. C. | .10 | @ | |
| News, f. o. b. Mills— | | | |
| Rolls (carloads) | 3.65 | @ | — |
| Sheets (carloads) | — | @ | 4.50 |
| Sheets (2 tons or over) | — | @ | 4.75 |
| Book— | | | |
| No. 1 M. F. (carloads) | 8.25 | @ | — |
| No. 2 M. F. (carloads) | 7.95 | @ | — |
| No. 3 M. F. (carloads) | 7.25 | @ | — |
| No. 1 S. C. (carloads) | 8.75 | @ | — |
| No. 2 S. C. (carloads) | 8.25 | @ | — |
| No. 3 S. C. (carloads) | 7.75 | @ | — |
| No. 1 Coated and litho | 14.50 | @ | — |
| No. 2 Coated and litho | 13.50 | @ | — |
| No. 3 Coated and litho | 12.75 | @ | — |
| Coated tinted | .15 | @ | — |
| Wrapping— | | | |
| Rag Brown | 4.75 | @ | — |
| White Rap | 5.25 | @ | — |
| "B" Manila | 5.50 | @ | — |
| No. 1 Manila | 6.50 | @ | — |
| Fiber | 6.50 | @ | — |
| Kraft, M. F. | 7.00 | @ | — |
| M. G. | 7.15 | @ | — |

### Pulp

(F. o. b. Mill)

| | | | |
|---|---|---|---|
| Ground wood | 30.00 | @ | 33.00 |
| Sulphite easy bleaching | 62.50 | @ | 65.00 |
| Sulphite news grade | 50.00 | @ | 55.00 |
| Sulphite, bleached | 78.00 | @ | — |
| Sulphate | 65.00 | @ | 67.50 |

### Old Waste Paper

(In carload lots, f. o. b. Toronto)

| | | | |
|---|---|---|---|
| Shavings— | | | |
| White Env. Cut. | 3.60 | @ | — |
| Soft White Book shavings | 3.00 | @ | — |
| White Blk. News | 1.80 | @ | — |
| Book and Ledger— | | | |
| Flat Magazine and Book Stock (old) | 1.50 | @ | — |
| Light and Crumpled Book Stock | 1.35 | @ | — |
| Ledgers and Writings | 1.75 | @ | — |
| Solid Ledgers | 1.75 | @ | — |
| Manilas— | | | |
| New Manila Cut. | — | @ | 1.60 |
| Printed Manilas | 1.20 | @ | — |
| Kraft | 2.05 | @ | — |
| News and Scrap— | | | |
| Strictly Overissue | .90 | @ | — |
| Folded News | .90 | @ | — |
| No. 1 Mixed Papers | .70 | @ | — |

Domestic Rags—

Price to mills, f. o. b. Toronto

| | Per lb. | | |
|---|---|---|---|
| No. 1 White shirt cuttings | .15 | @ | .15¼ |
| No. 2 White shirt cuttings | .07½ | @ | .08 |
| Fancy shirt cuttings | .09¼ | @ | .10 |
| No. 1 Old Whites | — | @ | — |
| Third and blues | .05½ | @ | .05¾ |

# New York Market Review

OFFICE OF THE PAPER TRADE JOURNAL,
Wednesday, January 14, 1925.

While nothing sensational in the way of business occurred in the paper market during the past week, business in every line came through in a reasonable, healthy manner indicating better things to come and that the market is slowly but surely toning up. Perhaps business has not showed just the improvement that many had expected after the first of the year but January is only half gone and conditions have had scant time to right themselves. No one looked for any great boom and no one wanted it for it has been learned by experience that a business boom is inevitably followed by reaction and what the paper men want at this time is a steady, consistent flow of orders. That is what pays the best in the long run and it is generally believed that that will be the record of the year—that buying will pursue an even, dependable course without any great high spots and consequently without any appreciable low ones. Business reports from outside of the trade are very gratifying. They indicate that most of the country's large business interests are going along nicely, showing improvement all the time and with fair expectations of even greater activity as time advances. Conditions as regard employment are also said to be generally satisfactory and business men say that the prosperity which will mark the present year will be a prosperity that will be generally participated in and felt by all classes.

News print continues to attract satisfactory business and this is the most certain quantity in the market. Its demand is certain to hold within reaching distance of normal no matter what conditions are and 1925 is sure to be an excellent year for it.

Book papers are in good demand. Fine papers are in excellent demand and tissues are in a most encouraging condition. The holiday demand for the latter was excellent and while this has naturally fallen off the business remains good and it is reported that orders are being placed for a greater period ahead.

Board is also in a fine, healthy state, the demand having shown a very favorable improvement of late and one which kept up well in spite of the inventory period. There was less accumulation of stock at the first of the year than is usually the case and the board men expect exceptionally busy times before long.

### Mechanical Pulp

The inventory period had a slowing down effect on mechanical pulp but conditions at the present writing are most encouraging and a material improvement in demand is expected immediately. The market is firm and the general tone healthy.

### Chemical Pulp

The chemical pulp market is constantly showing a better tone. The present demand is excellent and is steadily improving. Prices are firm and fewer concessions are being made than was the case a few weeks ago. The pulp mills are preparing to meet demands which will test all their resources and the pulp men are highly optimistic over future prospects.

### Rags

The inventory period as usual dealt something of a blow to the rag business and yet the falling off of business was not as pronounced as it often is at this time of the year. Some good business was placed, however, and rags are already coming back to the position they occupied before the inventory interruption came. The demand for domestic rags of practically every grade is good and while the demand for foreign rags is quiet at this time and improvement is looked for before the first of another month. Prices remain firm with scarcely any change from last week.

### Old Rope and Bagging

Old rope which picked up during the latter part of the year also felt the effect of inventory times and the past week saw a quieter demand. Prices, however, stood firm and the market figures that the lull is only temporary and that the old rope demand will soon resume a swing toward better business. Bagging went through inventory days without suffering and business during the week was most reassuring. Prices remain as they were a week ago but there is an upward tendency which is expected to materialize before long.

### Waste Paper

Waste paper slowed up very perceptibly the past week but it is expected that it will spurt forward during the next week as there are many inquiries in lieu of actual business and many of these are expected to materialize into good business.

### Twine

Twine demand has dropped since the holidays but that was only natural and the demand is now on a very substantial rock bottom basis which promises favorable business from now on. Prices remain fixed where they have been for some time and almost seem to be immovable.

## PHILADELPHIA TRADE READY

(*Continued from page* 32)

port Department of the J. L. N. Smythe Company, severing his connection with that firm to join the Paper House of Pennsylvania. Just as soon as the new plans for the expansion of that department have been perfected, the Paper House is ready to announce important changes now under way. Although the heads of the firm are listed as the younger generation of paper men in this city, they have placed the company among the leading houses of the Quaker City. They are Norbert A. Considine and his brother, Raymond J. Considine, and sons of the General Manager, A. P. Considine of the local daily newspaper, *The North American*. The firm enjoys, what is perhaps the largest news print distribution in this section, importing heavy shipments from the Sweden, Norway and Finland Mills, with more than 75 per cent of the imported news print coming into the Philadelphia ports consigned to its warehouses. It has on its list of newspaper consumers, more than 15 publications and large patronage in the printing trades. There also has been added to the sales organization Joseph Deal, well-known locally as a former associate of the Garrett-Buchanan Company and Reigel & Co. While the business personnel was being extended there was another addition to the home life of President Norbert A. Considine, when the family welcomed a new baby girl, Esther, who came last week, the fourth of the younger generation of Considines.

### Paper Salesmen to Learn Printing Art

Upon the suggestion of Norbert A. Considine, of the Paper House of Pennsylvania, there was organized last week a group of paper salesmen who are to receive training in the technical side of printing under the jurisdiction of the Philadelphia Typothetæ, with William T. Inness, of the Master Printers' Association the active head. About three months ago Mr. Considine suggested to Mr. Inness that it would be beneficial to the paper salesmen in their paper sales contact if they were equipped with more knowledge of the technical side of the printing art. Immediately after talking the matter over with Mr. Inness, the latter set about developing a school for the paper men, and last Monday night the new plans were placed before the paper salesmen at a meeting held under the direction of Mr. Inness at the Meridian Club. There were 75 paper men enrolled in the classes. At the Monday night session the paper men were introduced by Mr. Inness, to Norman T. A. Munder, the Baltimore lecturer on the Printers' Art and himself a Master Printer. The first talk in the series of ten lectures was given by Mr. Munder. He told of "Unusual Uses for Unusual Papers," and the local paper men received much valuable information along these lines from the expert.

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# Miscellaneous Markets

OFFICE OF THE PAPER TRADE JOURNAL,
WEDNESDAY, JANUARY 14, 1925.

The chemical market is not yet showing that spontaneity which had been hoped for and anticipated after the first of the year. In fact, the business of the past week has made some of the chemical men slightly morose and has set them asking themselves if present conditions are to continue beyond the mental dead line which has been set for them. There is a very keen competition at this writing and especially is that true of the items which show the least inclination to move. It is reported that sales are being made here and there at prices which permit little or no profit and it is likely that the market is trembling on the edge of what may prove an unusual concession-making period. On the other hand, prices are being strictly adhered to in the cases of some of the commodities and the consumers are as unwilling to buy at the present prices as the manufacturers are to make concessions. The result is hand to mouth buying of the closest description with sales made in only such cases as where the consumer finds himself in a position where he is absolutely forced to buy. January is half gone but certainly the situation has not been clarified any during the first two weeks of the year and chemicals can hardly be said to have accomplished any very brilliant prograss during that time. The past week has been really an uneventful one, with no changes in prices and practically no change in conditions.

BLANC FIXE.—Blanc fixe is no better or no worse than it was a week ago. There is a moderately fair demand but much blanc fixe business is still being held off. The powder is still quoted at from $75 to $80 a ton and the pulp at from $55 to $60.

BLEACHING POWDER.—Bleaching powder is making no great headway and this is one of the commodities on which the manufacturers and the consumers are at loggerheads. The former are holding strictly to their schedule and the latter continue to hold off on their buying as an evidence of their dissatisfaction with the price asked. When they do buy it is only hand to mouth buying which does not yield any very voluminous orders. The price is from 1.90 to 2.15 cents a pound.

CAUSTIC SODA.—Caustic soda is one item for which the demand may be said to be good. The demand has been holding up well through thick and thin and it keeps along that way. There is more and more future buying and contracts are being placed in increasing numbers. The price continues at from 3.10 to 3.15 cents a pound.

CASEIN.—Casein is doing fairly well but has showed no improvement during the week. It was expected to gain ground rapidly after the first of the year but is not quite justifying the expectations. It is quoted at from 10 to 11 cents a pound.

CHINA CLAY.—A fair demand is reported for China clay but that demand is practically no different from the demand it enjoyed the first of the year. The imported grades are bringing from $16 to $20 a ton and the domestic grades from $12 to $15.

CHLORINE.—Chlorine continues to run slowly and dissatisfaction over the price is holding back much business that would otherwise be placed at this time. Consumers are not renewing their contracts as rapidly as they might and buying is largely a matter of securing sufficient chlorine for immediate needs. It is quoted at from 4.50 to 7.00 cents a pound in tanks.

ROSIN.—There is nothing new to be said regarding rosin, the demand continuing about as it has for several weeks. The price is from $6.00 to $6.25.

SALT CAKE.—Sale cake remains quiet. Some business is being booked each day but the volume is not great and there is no indication of any material improvement just yet. It is selling at from $17 to $20 a ton.

SODA ASH.—Soda ash continues doing very well. Many more contracts were renewed for 1925 during the past week and the commodity has a promising forward look. It is quoted at 1.38 cents a pound on a flat basis at the works.

SULPHATE OF ALUMINA.—Sulphate of alumina is doing better than most items and the demand held up well during the week. Some good contracts are being booked and the general tone of the market is excellent. No concessions are being made but the present price is being paid with greater satisfaction than are the prices on some of the other commodities and as a result the consumers are buying liberally for the future. The quotation is from 1.40 to 1.45 cents a pound for the commercial grade at the Eastern works and from 2.20 to 2.35 cents a pound for the iron free.

SULPHUR.—Sulphur continues to meet an even demand and the price remains firm at from $18 to $19 a ton.

TALC.—Talc had a fair week, not quite up to the banner two weeks at the end of the year and yet very satisfactory. The price holds at from $16 to $17 a ton.

## PAPER RESEARCH DURING 1923-24

(*Continued from page 40*)

Commerce, "Packing for Foreign Markets." In view of the many comments received from manufacturers regarding these specifications, additional samples were secured and further investigation made regarding methods of testing. Revised specifications are now being prepared.

PAPER TOWELS (SCRIBNER)—

Data for preparing specifications for folded paper towels were requested by the Federal Specifications Board. A large number of representative samples were tested for absorbency and for strength. In general, towels having a rapid rate of absorption were deficient in strength, though a limited number were found to be satisfactory in both respects. Attempts were made to develop a wet tensile strength test but with unsatisfactory results, the bursting strength test on the dry paper being decided upon as the best method of measuring strength. Tentative specifications are being prepared which will be forwarded to manufacturers for their comments.

WINDOW ENVELOPE PAPER (LOFTON)—

A study is being made of materials used for the outlook aperture of window envelopes. This was undertaken at the request of the Post Office Department. Postal clerks find considerable eyestrain caused by this type of envelope, due either to lack of transparency or to the highly glazed finish of the material used in the outlook aperture. A study of twenty samples of materials used for this purpose has been made, with particular attention to the defects mentioned. It was found that while most of these papers had satisfactory transparency, this was usually accompanied by high glare. The one exception which was satisfactory both as regards transparency and lack of glare, was a paper which had the surface ribbed or corrugated to deflect the light rays and thus lessen the glare. Most of the papers had a gloss, as determined by the Ingersoll Glarimeter, of over 70 per cent, while the special type of paper mentioned had a gloss of only 25 per cent. The opacity, expressed by the contrast ratio referred to a black cavity and a magnesia surface, as determined by the Marten's photometer, varied from 0.09 to 0.30. A detailed report of this investigation is being prepared.

## To Represent Albemarle Paper Mfg. Co. in West

RICHMOND, Va., January 12, 1925.—Porter W. Butts has been appointed representative of the Albemarle Paper Manufacturing Company to travel mainly in the Middle Western states.

For several months Mr. Butts has been visiting customers in the interest of "Dixie" Kraft, but now in addition to this he will also be pleased to serve the needs of customers in Albemarle Blotting. His headquarters will be at 708 Transportation Building, Chicago.